Northwest Regional Emergency Medical Services and Trauma Care Council

FY'04 – 05 Biennial Plan

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I. AUTHORITY

Mission Statement

Our mission is to promote and support a coordinated system for local Emergency Medical Services/Trauma Care Councils by:

- Providing Resources/Funding
- Enhancing Education/Training
- Promoting Data Collection Analysis
- Facilitating Communication
- Promoting Standardization
- Promoting Public Education and Prevention

II. INTRODUCTION

A. Summary of Proposed Changes

During the past fiscal year mergers, upgrading of services and correcting service status has necessitated Min/Max number changes for the Northwest Region. Numbers have been as adjusted as deemed necessary by local EMS councils and in the standard Steering Committee practice of increasing maximum numbers by one to allow for future growth.

B. EXECUTIVE SUMMARY

Regional Overview

The Northwest Region Emergency Medical Services and Trauma Care Council, which consists of Clallam, Jefferson, Kitsap and Mason Counties and the West Olympic Peninsula EMS Council, represents a diversity in emergency medical services and trauma care. Levels of care available are Basic Life Support (BLS), Intermediate Life Support (ILS) and Advanced Life Support (ALS).

Response times vary depending on the area the call originates from; however, state standards are routinely met. In some areas only a few miles separate this diversity in levels of care and response times. These differences exist for a variety of reasons. An area of low population and low revenue translates into a low number of volunteers and low resources. Another reality is that many agencies do not have the financial resources available to provide their own service and must rely on a service responding from many miles away. Rural remote areas, which make up a large portion of the Northwest Region, have very limited access to telephones, resulting in delays of reporting emergencies. Cellular coverage in the Northwest Region has expanded recently providing better emergency reporting however, there continues to be areas without any coverage. Privately owned Citizen Band (CB), Handheld Amateur Radio (HAM), Very High Frequency (VHF) radios are a resource used on boats, and in rural wilderness areas.

Education awareness of the EMS and trauma care system is an imperative and ongoing process within the Northwest Region. The full extent of what is being done and what is lacking will not become a priority until those impacted by the EMS system are fully educated on the significance and importance of an EMS system to each community.

Jefferson County and West Olympic Peninsula (Neah Bay, located in the far northwest corner of the region), use Intermediate Level Support (ILS) providers. ILS is specifically targeted toward rural and remote providers and provides a very necessary service. Both areas will continue to train and upgrade more providers to the ILS level during this biennium.

Training

Continuing education for BLS and ILS providers within the Northwest Region is provided through an On-going Training and Evaluation Program (OTEP) developed by staff and Training, Education and Development committee members of the Northwest Region and approved by Medical Program Director's for each county. OTEP consists of modules taught on-site at agencies on a rotating basis. Basic skills and clinical knowledge of emergency medical topics are reviewed with each module. ILS providers also attend Paramedic Base Station training to enhance their more advanced skill level.

The Northwest Region EMS Council Training Coordinator and Training, Education and Development Committee members have completed a full revision and update of the Ongoing Education and Evaluation Program. The new modules are in a scenario-based format. Washington State specific objectives have been included. Participants will continue to use Appendix H Skills Evaluation Sheets to demonstrate individual skill competency.

Continuing education for Advanced Life Support providers is provided by each county by monthly base station meetings conducted by physicians and Medical Program Directors.

The Northwest Region also assists with recertification courses and additional training opportunities for providers from within the Region and throughout the state.

Communications

Communication centers, although not recognized in the trauma bill, are an integral component of emergency medical services and patient care. Kitsap County and Mason County have implemented Criteria Based Dispatching. Other dispatch centers in the Northwest Region use E-9-1-1 to activate their systems.

Injury Prevention and Public Information/Education

One committee divided into two regional components performs prevention activities in the Northwest Region.

During the past ten years, over 15,500 helmets have been distributed to disadvantaged youth living within the Northwest Region. Sober Roadways presentations are presented to an average of 800 participants per month, including Navy personnel. Additionally, Youth DUI Victim's presentations are made monthly to approximately 150 teens and their parents. Trauma Nurses Talk Tough presentations and Tread to Safety presentations reach an additional 100 – 200 participants each month. Seventeen Mock Crash presentations occurred during this past year and reached a total of 3000 teens. All of the above prevention activities, and the addition of car seat safety, will continue during the FY'2002-2003 biennium in an effort to reach as many participants as possible

Healthcare Facilities

The Northwest Region is unique in the fact that each county has only one major healthcare facility located in each area of population and geography. Kitsap County and Clallam County each contain a Level III trauma center within the region. Clallam County also has one Level IV trauma center located in Forks, Jefferson and Mason Counties each have a Level IV trauma center located in Port Townsend and Shelton, respectively.

To ensure quality assurance within the Northwest Region, a Quality Assurance Committee consisting of members from both hospital and prehospital venues conducts quality assurance reviews bimonthly. An annual retreat is also conducted during the month of May.

Overview

In January 2000 the Northwest Region became the first region within the state to adopt Regional Patient Care Protocols. Regional Protocols had a revision and reprinting in 2002. A third edition is currently under review, update and revision. This edition will be published and distributed in January 2004 with Medical Program Director's approval. Transport times and the addition of Criteria Based Dispatch are two areas that will be analyzed.

Human resources, from volunteer emergency medical personnel to committee members, are and will continue to be the highest priority for rural volunteer agencies and the Northwest Region EMS Council. The value of these volunteers is recognized by agencies and regions statewide. Recruitment and retention efforts will continue throughout the new biennium.

With the continued support of the Department of Health, and staff from the Office of EMS and Trauma Prevention, the Northwest Region will continue its efforts for the implementation and refinement of an effective region-wide trauma system. This system will enable agency personnel to meet the emergency medical needs of residents and visitors to the Northwest Region of the State of Washington.

III. INJURY PREVENTION AND PUBLIC INFORMATION/EDUCATION

A. REGIONAL IPPE PROGRAM:

Media
Continue to educate the public about the important role EMS plays in their communities through public service announcements on radio, television, newspapers, and use of the Public Access Cable Channels in our communities.

Legislature
We will continue to maintain and cultivate working relationships with our elected officials and supply them, on a regular basis, with injury prevention concerns as they relate to current or upcoming legislation. Legislation that deals with injury prevention issues will be closely followed and supported. Through the use of our legislative network we will keep EMS providers and community leaders advised as to the status of legislation as it passes through the legislative process in Olympia.

Display Board
With the use of the regional display board we will continue to keep the public informed about prevention issues whenever in attendance at community events such as health fairs, county fairs, schools, fire departments and Hospital safety days, and at Legislative Day in Olympia.

Brochures – Posters
Maintain and update Northwest Region produced brochures and posters for injury prevention programs that are currently promoting and producing new brochures and posters as the need arises. We will continue to partner with injury prevention groups throughout the region who have prevention priorities to develop billboards for public awareness campaigns.

Continue to make available to our communities' handouts such as information sheets, key chains, magnets, pens, pencils, and litterbags, which carry an injury prevention message.

The Prevention Committee produced two new brochures this year; one for Sober Roadways and one for the DUI Youth Panel. We ordered enough of these brochures to send to all four of our counties for distribution.

Public Speaking
Through men's and women's clubs, senior citizen centers, fraternal organizations, school general assemblies, classroom visits, Driver Education classes, and PTSA's we have diverse audiences to speak to about prevention and safety. Maintain and continue to expand participation in educational talks and work to expand our speaking schedule.

Health Fairs & Community Events
During the course of a year there are many opportunities to interact with the residents of our counties through participation in local community events. Health Fairs, County Fairs, Fire Department and Hospital Kid's Days and Safety Fairs are excellent opportunities to speak the community about prevention and safety concerns. Handouts carrying a prevention message are excellent ways to expose families to prevention

information on a daily basis. This is accomplished with litterbags that are carried in cars, key chains that are in use daily, magnets that are displayed on refrigerators, etc.

Injury Prevention Education For EMS Providers

Organize, present, and evaluate an injury prevention workshop for EMS providers. Efforts are made to select speakers and topics that are of top priority in our region.

Goal & Objectives

1. The goal in the Northwest Region is to heighten public awareness about injury prevention and control in the EMS and trauma system. The Northwest Region EMS & Trauma Care Council has many strategies for increasing public awareness about injury prevention and control in the EMS and trauma systems of our counties.

2. Develop and/or maintain a regional prevention/public education committee or network: We will continue to maintain and expand our Regional Prevention Committee. We have one committee divided into two regional components that performs prevention activities in the Northwest Region. Clallam and Jefferson committee members represent the northern part of the Northwest Region and Kitsap and Mason committee members serve the southern portion of the region. The Prevention Committees have a membership representing our local fire departments, police departments, DUI Task Forces, and business leaders and volunteers.

3. Identify and prioritize significant regional injury problems and high-risk groups, based on data (specify data resources utilized.)

Fatal Injuries 1996-2000	Clallam	Jefferson	Kitsap	Mason	Four County Total	WA State Total
Bicycle	1	1	3	1	6	76
Drowning	14	2	15	5	36	536
Falls	29	6	77	26	138	1774
Motor Vehicle	50	28	91	52	221	2988
Totals	***94***	***37***	***186***	***84***	***401***	***5374***

Non-Fatal Injury Hospitalizations 1996-2000	Clallam	Jefferson	Kitsap	Mason	Four County Total	WA State Total
Bicycle	37	17	89	21	164	2432
Drowning	5	0	14	6	25	300
Falls	1290	544	2518	944	5296	79314
Motor Vehicle	235	118	556	251	1160	15989
Totals	***1567***	***679***	***3177***	***1222***	***6645***	***98035***

The Prevention Committee found that the leading causes of death and injury were very much the same in all four of our counties. The sources that we used were statistics compiled by the Washington Traffic Safety Commission, State of Washington, Department of Health, Washington State Patrol, National Highway Traffic Safety Administration, and the Injury Prevention Network (The Trauma Foundation) and the Washington Safety Restrain Coalition, Mary Bridge Hospital in Tacoma, Harborview Hospital in Seattle. The data we used to assess problem areas and high-risk groups as broken down by age group, gender, cause of death or injury, by county and statewide statistics.

Injury Prevention And Public Information/Education

The Emergency Medical Services and Trauma System in Washington State has been integrating Trauma Prevention into its core mission since 1990.Trauma Prevention occurs at many levels in Washington State: through statewide program, through regional and local endeavors, and with both paid and volunteer people who firmly believe that trauma can be prevented, lives can be saved and disabilities prevented. The trend in unintentional trauma fatalities and hospitalizations is generally down. However, there are still hundreds of people who truly don't know there is something they can do to reduce their risk of trauma or they lack the financial means to obtain a prevention tool, or they know they should do something, but still don't. We want Washington to be known as a **safe state**, so that when new people move here, they actually do have a reduced risk for trauma.

The Northwest Region covers four counties; Clallam, Jefferson, Kitsap, and Mason. Although similar in size each of these counties is uniquely different from each other.

Clallam County

Clallam County is the farthest North and Port Angeles and Sequim are its largest cities. The city of Forks is also part of Clallam County and is located on the Olympic Peninsula. Most of the area is either farmland or undeveloped. Clallam County has 488 miles of county roads, Port Angeles has 144 miles of city roads, Sequim has 50 miles of city roads, and Forks has 18 miles of city roads. The number of licensed drivers in Clallam County is 50,961.

Jefferson County
Jefferson County is located in the middle part of the region with Port Townsend being its largest city. Most of the rest of the area is either farmland or undeveloped. Jefferson County has 389 miles of county roads, 90 miles of city roads, and 22,041 licensed drivers.

Kitsap County
Kitsap is our largest County in the region and has several good size cities. The cities of Bremerton, Poulsbo, Port Orchard and Winslow on Bainbridge Island are the largest cities. Kitsap has 965 miles of country roads. Bremerton has 126 miles of city roads, Port Orchard has 4.3 miles of city roads, Poulsbo has 30 miles of city roads, and Winslow has 156 miles of city roads (which includes all of Bainbridge Island). The number of licensed drivers for Kitsap County is 170,889, Mason has 36,757, Clallam has 50,961, and Jefferson 22,041.

Mason County
Mason County is our second largest county in the region and has one major city which is Shelton and a slightly smaller city of Belfair. Mason has 620 miles of county roads and 64 miles of city roads. There are 36,757 licensed drivers.

INJURY PREVENTION PROGRAMS AVAILABLE IN THE NORTHWEST REGION

SOBER ROADWAYS

Need
The leading cause of death and injury for all age groups (except birth to one year) in all four of our counties is motor vehicle crashes. Nearly 38% of these crashes are alcohol related --- making motor vehicle crashes and drunk driving our number one prevention priority. (State of Washington, Department of Health, Office of EMS & Trauma and the National Highway Traffic Safety Administration) It is also true that significant numbers of passengers in motor vehicles, motorcyclists, pedal cyclists, and pedestrians are killed and injured in these crashes.

Goal
Sober Roadways is designed to reduce the incident of serious injury or death to the public and to the residents of the Northwest Region. It will also be our goal to educate the community on the dangers of drinking and driving and the tragedies it causes. We will work with the legislature on initiating new laws and supporting existing laws that pertain to the drinking driver. The Washington Traffic Safety Commission awarded the Northwest Region $13,972.00. This money will be used to purchase handouts with anti-drunk driving messages, support travel expenses and speaker expenses in connection with Sober Roadways, run newspaper ads throughout the region, and to purchase equipment we may need such as a box-light.

Objectives
Our objectives for Sober Roadways:

- Hold regularly scheduled Sober Roadways presentations with DUI Victim's Panels in all four counties. A minimum of thirty presentations a year.

- Presentations to civic organizations and groups. We wish to do a minimum of 2 presentations per month, per county during the next two years.
- Distribution of literature, brochures and posters that tell the story of the tragedies involved with drinking and driving.
- Sober Roadways presentations will be coupled with Mock Crashes.
- Distribution of pens and pencils and key chains with Sober Roadways logo.

Activity Measurement

For each Sober Roadways presentation that we do we will have two ways to evaluate the program. Before the program begins we distribute"pre-test" asking questions about people's attitudes about drinking and driving. At the conclusion of the program we distribute to the audience a "post-test" that asks somewhat the same questions as the pre-test. By comparing the two answers we can determine whether attitudes changed because of the presentation and whether or not the person is likely to drink and drive after hearing Sober Roadways.

YOUTH DUI VICTIM'S PANEL

Need

Underage drinking and driving is a serious problem in all four of our counties. Youthful inexperience contributes greatly to the growing numbers of teens killed and injured in drunken driving crashes. Motor vehicle crashes are the leading cause of death in the United States for persons aged 16-24 years, and a substantial proportion of these crashes are alcohol related according to the JAMA Morbidity and Mortality Weekly Report. These national statistics transfer to our counties and are a reality in our communities.

A high priority injury prevention program for the Northwest Region has always been teenage drivers. For teens, age 16, the death rate is on the rise. The death rate increased among 16-yeqar-old drivers from 19 per l00,000 licensed drivers in 1995 to 35 per 100,000 in 1996. (National Highway Traffic Safety Administration). It is obvious that special care needs to be paid to teen drivers.

Goal

It is the goal of the Northwest Region to educate teens by giving them information on the problem of teen drinking and driving and reduce the risk of this activity through education. We will continue to build on our Youth DUI Panels and approach the two remaining counties that do not have panels and urge them to participate in this valuable program. It is our goal to distribute educational handouts to teens and parents alike to give them as much information as possible before they make the decision whether they want to involve themselves in this behavior. The Washington Traffic Safety Commission awarded the Northwest Region $4,097.00 to be used to fund the Youth DUI Victim's Panel. This money will be used to purchase handouts for teens with educational material regarding drugs and alcohol so they have as much information as possible on the effects of these on one's body. We will also pay for travel time and speaker expenses. Funds will also be used to purchase any equipment we might need.

Objectives
The Northwest Region will focus on the following objectives during the next two years:

- We will participate in a minimum of two regularly scheduled panels per two counties per month for two years.
- Presentations to civic groups and community organizations. A minimum of two presentations per month for two counties for two years.
- We will distribute through presentations, health fairs, county fairs, in the schools, and at panel presentations educational literature which will give teens a lot of information about alcohol and drugs.
- The Northwest Region will recruit teen speakers through contacts with the schools and through newspaper advertisements.
- Distribution of pens, pencils, mouse pads, flashlights all with an educational message.

Activity Measurement
Evaluations are an important part of the Youth DUI Victim's Panel. Our method of evaluating our effectiveness is by distributing a pre-test to teens attending the panel. They are asked to fill this pre-test out before they see the presentation. Once completed the pre-test is picked up, a post-test is distributed to the same teens. They are asked to complete the post-test at the completion of the presentation. The questions on both the pre-test and post-test are very similar and after comparing these two tests we are able to determine whether what they heard in the presentation had an effect on their attitude about drinking and driving and drugs.

BICYCLE HELMETS AND BICYCLE SAFETY

Need
Protecting children from serious injury--even death--and teaching them about bicycle safety and bicycle helmets has always been a high priority of the Northwest Region. The most vulnerable age group is nine to thirteen year olds and the highest percentage of deaths and injuries occur in boys according to the Washington State Department of Health, Office of EMS & Trauma, and National Highway Traffic Safety Administration. This statistics holds true for all four counties in the Northwest Region.

There is a great need for free and reduced cost bicycle helmets for low-income families, especially in cities where bicycle helmet ordinances have taken effect. The Northwest Region recognizes the need for free and/or low cost bicycle helmets and will introduce programs into the community that will reduce this need.

Goal
One of the Northwest Region's major goals is to work with Helmets For Youth Foundation to distribute as many helmets as available to our four communities over the next two years. The Helmets for Youth Foundation supplies the region with a minimum of 1500 helmets for distribution free to low-income youngsters per year. The region will supply another 500 helmets for low-income families. These 2000 helmets will be distributed yearly. These helmets will be individually fitted on each child receiving a helmet to make sure they fit properly. We will also supply youngsters with educational material so that they can learn the "rules of the road" and understand bicycle safety.

The Northwest Region will support a county-wide bicycle helmet ordinance. We will participate in and conduct a minimum of four bicycle rodeos per year in our four counties and visit a minimum of twelve elementary schools to teach bicycle safety.

The 1500 helmets we distribute free are paid for by the Helmets for Youth Foundation as is any expenses the Prevention Coordinator may incur during that distribution such as travel expense. The 500 helmets we receive each year are donated to us by the Washington Traffic Safety Commission.

Objectives
The Northwest Region will focus on the following objectives during the next two years.

- Place a minimum of 2000 free bicycle helmets on low-income youngsters in Kitsap, Mason, Jefferson and Clallam counties per year, and custom fit the helmets to fit individual heads.
- Visit a minimum of twelve elementary schools per year and educate youngsters about bicycle safety and bicycle helmets.
- Participate in and organize a minimum of twelve bicycle rodeos per year.
- Distribute educational literature to elementary and junior high school students that emphasizes how to ride their bicycles safely.
- Assist in the passage of county and city ordinances for mandatory helmet use for all ages.

Activity Measurement
The Northwest Region along with Safe Kids will be doing a field survey to determine how many youngsters and adults are wearing helmets. Random check points will be set up with volunteers counting the number of those wearing helmets or not wearing helmets. The results of this survey will be compiled to determine if our helmet distribution is making a difference.

TRAUMA NURSES TALK TOUGH

Need
There is clearly a need for more education to both youth and adults about the dangers of drinking and driving. As identified earlier in this document motor vehicle crashes and drunk driving are our number one health hazard. Specifically the latest statistics available for motor vehicle crashes in the Northwest Region ending in 2000.

Clallam County	72 fatal automobile crashes
Jefferson County	55 fatal automobile crashes
Kitsap County	148 fatal automobile crashes
Mason County	88 fatal automobile crashes

Approximately 38% of these crashes were alcohol-related and a large majority of them involved 25 year-old and younger drivers.

The Northwest Region has a need to educate these drivers and reduce the number of alcohol-related crashes.

Goal

Trauma Nurses Talk Tough is a hard-hitting, comprehensive program that graphically illustrates the tragedies associated with drinking and driving. This program can be tailored to meet all the needs of all age groups and includes bicycle safety as one of its components. It is the goal of the Northwest Region to present Trauma Nurses Talk Tough a minimum of two times per four counties yearly. We will work to expand this program to include civic organizations.

Trauma Nurses Talk Tough is often coupled with our Mock Car Crash demonstrations and is a very effective tool. At Mock Car Crashes which are presented to graduating high school students we will reinforce the message “don’t drink and drive”. The Northwest Region expects to participate in a minimum of seven mock crashes in the coming year or 14 presentations in a two-year period with an estimated attendance of 7,000 .

Funds for Trauma Nurses Talk Tough are part of a $7500.00 grant from the Washington Traffic Safety Commission. This money went to purchase power-point presentations from Emmanuel Hospital in Portland, Oregon, and a box-light to show the presentations on.

Objectives

During the next two years the Northwest Region will:

- Do a minimum of 24 Trauma Nurses Talk Tough presentations in all for of our counties per year.
- Couple Trauma Nurses Talk Tough presentation with Mock Crashes whenever possible.
- Distribute literature to adults and teens about the dangers of drink and driving and high risk driving behavior.
- Expand Trauma Nurses Talk Tough programs to include more of the communities, especially adult groups that have expressed a desire to learn more about motor vehicle crashes and drunk driving.

Activity Measurement

The best way to judge whether a program is making a difference is by asking questions of your audience. A list of questions is distributed to the audience to determine what their attitude is about drinking and driving before they see the TNTT presentation. That list is collected and a post-test is distributed to the audience with many of the same questions so that we can determine whether or not there is any change in attitudes before and after the test.

IV. PREHOSPITAL SYSTEM

A. COMMUNICATION

Demographics

The Northwest Region consists of Clallam, Jefferson, Kitsap and Mason Counties and also includes West Olympic Peninsula EMS Council, which includes West Jefferson County and West Clallam County.

Clallam County has three incorporated cities, which are Port Angeles, Sequim and Forks. Heavy rainfall, averaging 100 inches annually in the West Olympic Peninsula area, accompanied by strong winds during the fall, winter and spring, and an influx of tourists during the summer months, produces an increase in highway related accident injuries necessitating specialized training and equipment for EMS personnel. These conditions often add an additional stress to the emergency medical services response system. Additionally, many areas are extremely rural, without population and difficult to reach. Coast Guard personnel are available to assist, when necessary, at EMS emergencies by providing personnel and air transportation.

Jefferson County's location on the Olympic Peninsula includes several unique features affecting delivery of EMS. The county is in effect cut in half by the boundaries of Olympic National Park and the surrounding National Forest. Topography is varied throughout the county. Over 530,000 acres of National Park land and 83,000 acres of Forest Service holdings include foothills, mountains, and thick forests, which make ground transportation impossible and often blocks communications.

The 1300 seat McCurdy Pavilion hosts numerous events each year, which attracts a large tourist population. Jefferson County has only one incorporated city located within the county, Port Townsend. Additionally, the many marinas and water related activities require a variety of skills and specialized training for emergency medical personnel.

Kitsap County is the home of the Pacific Northwest region’s third-largest civilian employer (after Boeing and Microsoft) Puget Sound Naval Shipyard. Puget Sound Naval Shipyard is only one of several naval installations located within the county.

Kitsap County is a long peninsula with limited cross sound access. A singular highway makes inter and intra-county travel restrictive, cumbersome and time consuming. The long shoreline and water boundaries of the county lead to increased numbers of water-related incidents. Though most of Kitsap County is rural-semi-rural, it has a very high rural density. There are no large cities in the county, even though the current rapid growth and expansion is predicted to continue for many years. High volumes of tourists pass through Kitsap County to other destinations including the Olympic National Park and Canada.

Mason County is impacted by its proximity to Hood Canal as well as its many lakes, which not only create a climate in which water accidents occur, but which often prevents quick access for response of EMS providers. Logging and Christmas tree farming are major industries producing remote-area trauma or medical emergencies, which need special consideration by the EMS system. There is a state multi-use recreational area located in Mason County which attracts a large number of motorized off-road three and

four-wheel vehicles. This area produces a large number of trauma calls in the spring and summer months.

In summary, the Northwest Region is impacted by water and mountains, particularly Olympic National Park, Hood Canal, the Strait of Juan de Fuca, Puget Sound, and the Pacific Ocean, bad weather, and a non-dependable road system when adverse weather occurs. This creates many problems in response mechanisms and dependability of ground transport and communications systems. Distance from major trauma centers - from one to five hours ground transport time - additionally creates unique EMS system needs. Air transport is frequently unable to get into the Northwest Region due to a lack of facilities that has the necessary instruments to allow an air ambulance to fly in bad weather.

PUBLIC ACCESS

Issue

Although our entire region is covered by Enhanced 911, due to distance, terrain and county configuration, we have a variety of agencies which actually dispatch EMS.

Clallam County is divided into three EMS dispatching centers. Enhanced 9-1-1 service is dispatched by PENCOM, located in Port Angeles, which dispatches for Clallam County Fire Districts Number 2, 3, 4 and 5. Olympic Ambulance, a private ambulance company, responds as an agency of the fire departments. PENCOM also dispatches for Port Angeles Police Department, Clallam County Sheriff's Department, Sequim Police Department, Lower Elwha Tribal Police and after park hours for Olympic National Park Law Enforcement. Ray Ellis Ambulance, located at Forks Community Hospital, is dispatched by Enhanced 9-1-1 calls received at the Forks Police Department, which tones out EMS personnel, or they can be accessed by dialing a local seven-digit hospital number. Neah Bay Ambulance is dispatched by Enhanced 9-1-1 calls to the Makah Tribal Law & Order Dispatch Center.

All dispatch in Jefferson County is accessed by Enhanced 9-1-1 calls received at the newly created JeffCom dispatch center. Previously, all calls were dispatched through the Sheriff's Office however these two agencies were separated this previous year and the dispatch center is now the consolidated dispatch center for all EMS, law and fire calls in Jefferson County.

Kitsap County has one dispatch center, CENCOM, which dispatches for county fire, EMS and law enforcement agencies by Enhanced 9-1-1. Kitsap County recently transitioned to Criteria Based Dispatching (CBD). Kitsap County agencies and their EMS Council have borne the impact of implementation and training costs. Kitsap EMS Council also had to incur the cost of providing liability coverage for the Medical Director overseeing CBD. Unlike Emergency Medical Dispatch, Criteria Based Dispatch requires comprehensive Medical Director participation.

Mason County is served by two dispatch centers. SHELCOM, located in Shelton, dispatches for the City of Shelton, Mason County Medic One and Mason County Fire Districts Number 4, 11, 12, 13 and 16. FIRECOM located at Mason County Fire District

Number 5, Mason-Benson Lake Station dispatches for Mason County Fire Districts Number 1, 2, 3, 5, 6, 8, 9, 17 and 18 and Mason County Medic One into those areas served by that organization. Mason County is currently using a Criteria Based Dispatch System. Both dispatch centers are accessed by the public by using the E-9-1-1 system.

Needs

Our region has brought the need for a state-wide alternative communication system to our local councils and are working together to take part in a state-wide system that can be used in catastrophic emergencies. Funding for dispatcher training which will provide advanced classes at a reasonable distance is needed, especially in our rural areas.

Strengths

All areas of our region are covered for EMS dispatching; the majority of which use an enhanced 911 system. The two largest counties, Kitsap and Mason, have currently upgraded to a Criteria Based Dispatching system, further refining the appropriate level of care dispatched to each call. This past year, Kitsap County's CENCOM passed a levy which will pay for a new dispatch facility. This facility will be located in an emergency services complex which will also include the DEM office, Coroner's Office and the Regional Firefighter Training Facility. Jefferson County recently made the dispatch center an entity of its own after years of using the Sheriff's Office as the dispatching agency.

All dispatching agencies in our area have on-going training programs, pre-arrival instructions for callers, and quality assurance programs. Also, due to the Criteria Based Dispatch system used in Kitsap and Mason Counties, MPD involvement and quality assurance reviews have been greatly increased since these are necessary components of refining the dispatch criteria.

Weaknesses

Most dispatch agencies in our counties are not consolidated meaning that dispatch agencies often overlap or cause a primary dispatch center/secondary dispatch center relationship to evolve. Also, some of our counties have a military presence which relies almost exclusively on their own separate dispatching system.

Another problem, due to the rural nature of our region, is that many agencies face a lack of funding and a lack of local training resources to give all employees, especially new employees, updated training. Also, not all agencies request and/or receive MPD involvement with dispatching.

Goals

We would like to see all counties using the same dispatching guidelines and have their personnel all trained to the same level. We encourage the military, Indian reservations, and other separate agencies to play an active role in their respective local county council and Regional EMS Council in order to facilitate the exchange of information and encourage more cohesiveness in our overall communication system. We would also like MPD involvement in all of our County's dispatching systems, due to the fact that all of our counties base their standard of pre-hospital care on our Regional Protocols.

DISPATCH

Training for Dispatch Personnel

The diversity of dispatch centers throughout the region provides a variety of available training aids. All agencies participate in a minimum of ongoing training from once to four times a year with various training tools including EMD Recertification, Telecommunicator I and II Certification, Access Certification, Powerphone and in-house training covering a variety of topics. Criteria Based Dispatch Centers provide their dispatchers with an additional 120 hours per year of training including recertification, in-house and projects.

Dispatch Prioritizing

Criteria Based Dispatch and Emergency Medical Dispatch guidelines and other recognized EMD courses provide specific medical criteria so that dispatchers are able to determine the severity of an illness or injury and the appropriate level of EMS response to be dispatched. Dispatch centers within the Northwest Region do use either Criteria Based Dispatch or Emergency Medical Dispatch for prioritization of calls.

Provisions for Bystander Care with Dispatcher Assistance

All dispatch centers located within the Northwest Region provide bystander assistance until the appropriate EMS personnel arrive on-scene. Numerous cases have been documented that EMT dispatcher's have made a significant difference in patient outcome prior to the arrival of EMS personnel on-scene.

PCP's or COP's

At this time no specific PCP's or COP's apply to dispatch. Criteria Based Dispatch will be added to PCP's during their next revision.

Primary and Alternative Communications Systems

In the major population areas of the Northwest Region primary dispatch centers are available 24/7. However, in the rural and wilderness areas of the Region secondary dispatch centers have been identified. In the West Olympic Peninsula area including Forks, Neah Bay and the Olympic National Park, PenCom located in Port Angeles acts as a secondary dispatch center when their primary centers are unavailable.

CenCom, located in Kitsap County, is the primary dispatch agency for all police, fire and medical in the county. Puget Sound Naval Shipyard, a federal installation, has a self-contained dispatch system. Bangor NSB, another federal military installation, also has their own dispatch system for their offices/industrial area and their residential 911 calls go through CenCom.

If the need arises, ShelCom and FireCom, in Mason County, act as back-up dispatch centers for each other.

System Operation During Single Patient, Multiple-Patient, Mass Casualty and Disaster Incidents

Each county has their own operating frequencies that allow direct communication between EMS units as well as to their communication center. In the event of extreme traffic, cell phone communication may be utilized.

If multiple county jurisdictions are involved in a multi-casualty incident, there are alternate operating frequencies that may be used i.e. state chiefs and LEARN.

For EMS units contacting base hospitals, either HEAR or direct land-line recorded communications occur.

Roles of Other Public & Private Agencies
Each county has a multi-function communications center where fire, EMS and law enforcement are located in the same communications center and in some cases a single communications officer may be performing all functions.

Communication System Integration
Single patient communications are accomplished by designated frequency from the communications center to the responding unit.

In a mass casualty situation a designated Communications Officer assumes communication responsibilities for that incident only when staffing permits in which all units are directed to a specific frequency. In which an Incident Command structure is in place.

Hospital communications can be accomplished through HEAR frequency, MEDNET channels, landline and cellular communications.

Multiple Agency Communications
Agencies have the ability to communicate with other jurisdictions through designated frequencies or the statewide LEARN channel. Except areas of geographical isolation, all would be directed through the Incident Commander using the ICS structure.

Triage and Transport
The first EMS and trauma providers' on-scene assess the patient(s) for the possibility of activation of the Trauma System by using START Triage, State of Washington Pre-hospital Trauma Triage (Destination) Procedures and Northwest Region Patient Care Procedure based on an ISC system. Upon evaluation of the patient(s) and determination of the need for a trauma team, the Paramedic, EMT, or appropriate medical personnel shall contact medical control at the nearest or most appropriate designated trauma center and request the activation of the Trauma System.

Once identified, trauma patients are banded, treated, transported and trauma data collected as quickly as possible. In all cases, the goal of the Northwest Region Trauma System is to have all major trauma patients delivered to the most appropriate trauma center to meet the needs of the patient within 60 minutes from the time of arrival of EMS on scene of the trauma incident.

Evaluate Communication System Providers and Dispatch Activities Using Table A
See attached.

TABLE A.
EVALUATION OF COMMUNIATOIN SYSTEM PROVIDERS & DISPATCH ACTIVITIES

		Clallam County	Clallam County	Clallam County
	Survey Questions	***PenCom***	***Neah Bay***	***Forks Police***
1	Citizen Access	E-911; primary agency in Clallam Co.	E-911, secondary to PenCom	E-911, secondary to PenCom
2	Consolidated Centers	Partially	Partially	Partially
3	Number of Employees	17	6	6
4	Number of Employees Not Trained	0	0	0
5	Kinds of Training	In-house; other as available	In-house; other as available	In-house; other as available
6	Frequency of Training	As needed; as available	As needed, as available	As needed, as available
7	On-going Training & Certification	Yes	Yes	Yes
8	Kinds of Protocols	Powerphone, EMD	Powerphone	Powerphone
9	Medical Director Involvement	Yes	Yes	No
10	Dispatch Prioritizing	Powerphone 1-2-3	No CAD system, very few calls	Powerphone 1-2-3
11	Bystander Care	Yes	Yes	Yes
12	Pre-arrival Instructions	Yes	Yes	Yes
13	Quality Assurance	Yes	Yes	Yes

		Clallam County	Jefferson County	Kitsap County
	Survey Questions	***Olympic National Park***	***JeffCom***	***CenCom***
1	Citizen Access	E-911, secondary to PenCom	E-911	E-911
2	Consolidated Centers	Partially	Yes	This is the primary agency in Kitsap County
3	Number of Employees	3	7	42
4	Number of Employees Not Trained	0	0	All are trained
5	Kinds of Training	In-house	In-house; other as available	EMD, CBD, in-house
6	Frequency of Training	As needed, as available	As needed, as available	10 hrs/mo plus 10-20 hrs/yr EMD & CBD
7	On-going Training & Certification	Yes	Yes	Yes
8	Kinds of Protocols	Powerphone	Powerphone; SOP's	CBD
9	Medical Director Involvement	No	No	Yes, sanctions protocols
10	Dispatch Prioritizing	Very few calls	Powerphone 1-2-3	Triage
11	Bystander Care	Yes, via PenCom	Yes	Yes
12	Pre-arrival Instructions	Yes, via PenCom	Yes	Yes
13	Quality Assurance	No	Yes	Yes

TABLE A.
EVALUATION OF COMMUNIATOIN SYSTEM PROVIDERS & DISPATCH ACTIVITIES

		Kitsap County	Kitsap County	Mason County
	Survey Questions	***PSNS NesCom***	***NSB Bangor***	***ShelCom***
1	Citizen Access	911, cell, radio, fire box	911 or 396-4444	E-911
2	Consolidated Centers	Partial; secondary to CenCom	Partial; secondary to CenCom	This is the primary agency in Mason Co.
3	Number of Employees	10	10	10
4	Number of Employees Not Trained	All are trained	All are trained	All are trained
5	Kinds of Training	In-house; CBD	In-house; CBD	In-house; other as available
6	Frequency of Training	As needed	As needed basis	As needed, as available
7	On-going Training & Certification	Yes	Yes	Yes
8	Kinds of Protocols	CBD; Federal	CBD; Subase approved	Powerphone
9	Medical Director Involvement	Yes/CBD	Yes; sanctions protocols	Yes
10	Dispatch Prioritizing	Triage	Triage	ALS/BLS criteria
11	Bystander Care	Yes	Yes	Yes
12	Pre-arrival Instructions	Yes	Yes	Yes
13	Quality Assurance	Yes	Yes	Limited

		Mason County	All Counties
	Survey Questions	***FireCom***	***State Patrol***
1	Citizen Access	E-911	Via 911 centers; 800#
2	Consolidated Centers	Secondary to ShelCom	Independent Entity
3	Number of Employees	10	Appx. 18
4	Number of Employees Not Trained	All are trained	All are trained
5	Kinds of Training	All staff are EMTs; Powerphone	Per State Patrol Guidelines
6	Frequency of Training	Ongoing to maintain certification	Ongoing, quarterly
7	On-going Training & Certification	Yes	Yes
8	Kinds of Protocols	Powerphone & CBD	n/a
9	Medical Director Involvement	Yes	n/a
10	Dispatch Prioritizing	Powerphone 1-2-3	State Patrol CAD
11	Bystander Care	Yes	n/a
12	Pre-arrival Instructions	Yes	n/a
13	Quality Assurance	Yes	n/a

MEDICAL DIRECTION OF PRE-HOSPITAL PROVIDERS

Medical Program Directors

Medical Program Directors (MPD's) are the integral link between prehospital care and the hospital. MPD's in the Northwest Region provide field direction, utilizing Northwest Region Patient Care Protocols, which they are instrumental in developing. MPD's approve continuing medical education, recommend recertification, and provide training and quality assurance for BLS, ILS, and ALS providers.

In Kitsap and Mason counties, the MPD will also provide direction to communications delivered by dispatchers through Criteria Based Dispatching.

Providers working on Bainbridge Island, located in Kitsap County, have functioned under Dr. Copass as their MPD for many years. The new MPD of Kitsap County will not be renewing this agreement with Dr. Copass. As of January 2003 those providers will be operating under the supervision of the Kitsap County Medical Program Director and Northwest Region EMS Protocols. Treatment and transport of patients will not be affected.

Delegated Supervising Physicians

Base Station Emergency Physicians, as outlined in the State of Washington Medical Program Director Handbook, provide on-line medical control.

Delegated Training Physicians

Due to logistics, the Northwest Region has several counties currently using a Delegated Training Physician. That delegate is responsible for overseeing all levels of training, however, does not have the authority to sign initial certification and recertification recommendations.

Regional Patient Care Protocols

Northwest Regional Patient Care Protocols for ALS, ILS and BLS providers are well established in all counties.

The Emergency Medical Services Coordinator for Kitsap County has assumed the lead role, with the assistance of a committee, in writing and reviewing the Northwest Region EMS Patient Care Protocols.

Any changes or additions to the Protocols are distributed as needed. A full review incorporating updates, changes, and additions will occur every two years. To reduce the cost of printing the Protocols are produced in three-ring binder format. A reprint will be required at the end of the full review and the expense of in-house printing will be passed on to each agency.

Protocol Revision Timeline	
April 2002	Initial review by committee and MPD's
December 2002	MPD meeting to discuss proposed Protocol language
September 2003	Protocols approval by MPD's
December 2003	Printing of Protocols
January 2004	Distribute revised edition of Northwest Region EMS Patient Care Protocols to Current EMS Personnel Resources

Needs

Due to budget restrains the Northwest Regional Emergency Medical Services and Trauma Care Council will be unable to bear the printing costs of the revised Protocols. In the future agencies will be required to pay for their providers' copies.

Goals and Objectives

The Northwest Region is the first Region in the State of Washington to have "Regional Protocols". The use of regional protocols has created a continuity of patient care as patients are frequently transported across county and agency boundaries to reach appropriate medical care.

The Northwest Region EMS Protocols are currently being reviewed and revised by committee. These revisions will be reviewed and approved by the MPD's prior to printing. Our goal is to distribute the next edition of Northwest Region Patient Care Protocols in January 2004.

To reduce agency costs, the Northwest Regional EMS & Trauma Care Council has previously had the Protocols printed at the Monroe Prison. Since we are a non-profit agency, we qualify for their printing services and the lower costs will be passed on to all agencies. Competitive pricing surveys will be done prior to the next printing to ensure our region receives the best price possible.

PRE-HOSPITAL EMS AND TRAUMA SERVICES

Current Status

The scope of trauma and medical care given by EMS providers and health care facilities is tremendous in the face of current challenges EMS personnel face today. The care of emergency medical and trauma patients in the Northwest Region is most influenced by varied populations and geography. EMS services in rural areas are provided by volunteer agencies and have significantly longer response times and transports to receiving facilities. Also in rural areas emergency medical services are given by BLS providers, small rural clinics, or hospitals, all with limited resources and equipment. In the suburban areas emergency medical services are provided by BLS, ILS, and ALS agencies and hospitals with a wider range of resources, including sophisticated medical specialties and equipment. Our nearest Level 1 Trauma Center is Harborview Medical Center located in Seattle, King County. Harborview Medical Center is frequently utilized by activating existing air transport services.

EMS Personnel Needs & Goals

The following is a profile of the workforce in the region by county, including prehospital and hospital personnel:

CLALLAM		
Prehospital	First Responder	14
	EMT-B	175
	IV-TECH	16
	IV/AIR TECH	3
	Intermediate Life Support	2
	Paramedic	26
TOTALS		**236**

JEFFERSON		
Prehospital	First Responder	1
	EMT-B	69
	IV-TECH	13
	IV/AIR TECH	0
	Intermediate Life Support	11
	Paramedic	13
TOTALS		**107**

KITSAP		
Prehospital	First Responder	7
	EMT-B	450
	IV-TECH	32
	IV/AIR TECH	0
	Intermediate Life Support	0
	Paramedic	60
TOTALS		**549**

MASON		
Prehospital	First Responder	25
	EMT-B	142
	IV-TECH	21
	IV/AIR TECH	2
	Intermediate Life Support	0
	Paramedic	21
TOTALS		**211**

NORTHWEST REGION		
Prehospital	First Responder	47
	EMT-B	836
	IV-TECH	82
	IV/AIR TECH	5
	Intermediate Life Support	13
	Paramedic	120
TOTALS		**1103**

Prehospital Training Resources

Initial and ongoing training of personnel is imperative to maintain the highest level of patient care possible. The Northwest Regional EMS & Trauma Care Council assists agencies in meeting their personnel training needs in a variety of ways. Assistance begins with course applications, funding reimbursement, instructor resources, training equipment resources, coarse completion examinations and wrap up.

Prehospital Personnel Training and Community Based Training (CBT) occur at individual departments, local agencies and county levels. First Responder, Emergency Medical Technician-Basic, Emergency Medical Technician-Intermediate, Intravenous Technician, Airway Technician, and Advanced Life Support courses are budgeted and coordinated through a hosting agency or Training Coordinator.

Clallam County agencies utilize Peninsula Community College located in Port Angeles WA for initial First Responder and Emergency Medical Technician courses. The West Olympic Peninsula agencies conduct initial and ongoing training within their own departments. Due to the remote location of the West Olympic Peninsula instructors are comprised of nurses and physicians from the local clinic, experienced EMS providers within their own agencies as well as inviting instructors from outside their area to come in. Jefferson County EMS Council has a designated Training Coordinator who fulfills the

scheduling and instruction needs of that county. Kitsap County EMS Council also has a Training Coordinator who fulfills the scheduling and instruction needs. Kitsap uses the resources provided by Olympic Community College located in Bremerton WA. Mason County EMS council has established a Training Committee which meets regularly to schedule courses and instructors for their departments.

Initial Certification Paramedic Training is not available in the Northwest Region. All of our region's Medical Program Directors have made the attendance of the monthly Paramedic Base Station Continuing Education Meetings a condition of employment. Intermediate Life Support and Paramedic level providers receive CME through monthly paramedic base station training. Approximately once each quarter skills lab sessions are held where advanced skills such as, difficult airway, IV therapy etcetera are practiced.

Other courses such as ACLS, PALS, BTLS, PHTLS, 48hr Paramedic Refresher, and Instructor Workshops are made available for providers. These are offered through the Northwest Regional EMS & Trauma Care Council office, Individual County EMS Councils, or local agencies.

Continuing Medical Education (CME) at all levels of certification occur in each county is directed and approved by the respective Medical Program Director (MPD). The Northwest Region has successfully implemented an Ongoing Training and Evaluation Program (OTEP) throughout the Northwest Region. This program offers all levels of providers basic CME.

OTEP is comprised of modules which cover the cognitive and psychomotor aspects of standard EMS training. The current OTEP is based on the national standards for First Responder and Emergency Medical Technician curriculum along with Washington State Specific Objectives. Each module has a written knowledge assessment evaluation and skills labs which pertain to the subject matter. With active participation in an approved Ongoing Training and Evaluation Program, BLS providers are able to renew their Washington State First Responder/Emergency Medical Technician-Basic Certifications.

The 2003 updated edition of the OTEP is available in a written and/or power point presentation format. EMS Jeopardy and Bio-terrorism modules have been added to broaden the training. In order to standardize the instruction of this new format a "Train the Trainer" video has been distributed to each county MPD. It explains the format and various options instructors may add to best suit their area's specific needs without diverting from the required learning objectives.

Prioritizing and Conducting Prehospital Training

Local agencies and County EMS Councils dictate the budget and schedule prehospital training. Request for Proposals (RFP's) are sent to all agencies within the Northwest Region during the month of December. Agencies are directed to complete an application identifying training needs, project objective including what training is required, and assessment of why the training is necessary (including personnel numbers), describe how training will be completed and how the success of the project will be measured or evaluated.

Completed applications are then sent to their local council for review and prioritization and then forwarded to the regional office. A review by the Executive and Funding Committees determines actual need, contractual compliance and budgetary boundaries are completed and a recommendation is taken to the full council for approval.

Additional training or equipment needs are addressed on an as needed basis requiring a written request from the appropriate local council. Requests are reviewed by the Executive and Funding Committees for compliance and approval by the full council or by the Executive Committee if so directed by the council.

Demographically, the Northwest Region has a very large volunteer personnel population, coupled with geographical barriers it is a challenge to meet training and response needs.

All of our region's MPD's have approved and implemented Regional Patient Care Protocols, regional Ongoing Training and Evaluation Program. By doing this a continuity of information is well established. OTEP training can easily be conducted at the agency level allowing for providers to receive their continuing education without incurring additional out-of-pocket costs and out of area travel for training.

Additional Public Safety Personnel

The Northwest Region has a significantly greater need and use for additional Public Safety Personnel because of the natural geography within the region. County and municipal law enforcement has always been and always will be a vital compliment to the EMS system.

The National Park Service encompasses a large portion of the region. The National Park Service personnel are trained and certified at the levels of First Aid, First Responder, and Emergency Medical Technician-Basic. They have the ability to respond, treat and extricate victims until local help arrives or an air-evacuation occurs.

Search and Rescue (SAR) teams are available for victim location and extrication with a volunteer compliment that is well trained in wilderness medicine as well as having personnel associated with local EMS agencies.

Hazardous Material Teams assist with clean up and control of chemicals and other toxic materials encountered during EMS calls, are available through local Fire Departments and United States Naval Submarine Base Bangor located in Kitsap County.

Varied types of terrain within our region mandate the use of various Patient Transport methods. The United States Coast Guard is a valuable entity within the region, as coastal waters surround the Northwest Region on three sides. With their aircraft and water vessels they can quickly and efficiently locate and extract injured and ill victims for direct transport to local hospitals, trauma centers or rendezvous with local EMS. The United States Army's 54th Air-Medical Wing (MAST) deploys into our region with a compliment of trained medical personnel on board. MAST has hoist rescue and/or direct transport to local hospitals/trauma centers capability. Airlift Northwest, a private rotary and fixed wing transport service, is widely used throughout the region.

Needs

Demographically, the Northwest Region serves a very large and diverse area. Varying population pockets, coupled with geographical barriers make volunteer/career personnel training and response needs a challenge.

We do not have enough trained instructors to comfortably meet the prehospital provider demographics and geography demands. There is also a lack of continuing education programs for both ILS and Paramedic level providers throughout the region.

Goals and Objectives

The Northwest Regional EMS & Trauma Care Council and County EMS Councils are aware of the needs faced by local EMS providers and agencies. It is our goal to continue assisting agencies in overcoming these challenges.

In an effort to relieve and reduce the stress on agencies and their providers the Ongoing Training and Evaluation Program (OTEP) in all region counties. OTEP training is conducted at the agency level and allows for providers to receive their continuing education without incurring additional out-of-pocket costs and out of area travel for training.

OTEP revision has just been completed and distributed January 2003. Further revisions and updates will occur every two years, by the Northwest Region's training coordinator and Training Education and Development Committee. Interim updates will be provided to instructors as new information warrants.

Courses such as ACLS, PALS, BTLS, PHTLS, 48hr Paramedic Refresher, and Instructor Workshops are made available for providers. These are offered through the Northwest Regional EMS & Trauma Care Council office, Individual County EMS Councils, or local agencies.

All of our region's MPD's have approved and implemented Regional Patient Care Protocols, regional Ongoing Training and Evaluation Program. By doing this a continuity of information is well established. With the support from all of our MPD's, Region Training Coordinator and SEI Instructors, local agency personnel issues and training needs are well handled.

Maintaining the use of Regional Protocols has improved the standard and continuity of patient care. Continuing Regional OTEP training will enhance the knowledge fundamentals for all EMS providers. EMS instructor positions are being filled by volunteer and paid providers. The Senior EMS Instructor (SEI) and Basic Life Support (BLS) Evaluator training programs are fulfilling the ongoing demand for qualified new and experienced instructors in our region. This greatly enhances the standard of education and continuity of patient care across the various county/agency boundaries. Regional EMS & Trauma Care Council supports these objectives with, planning, scheduling, interagency networking, application processing, updated and revising Regional Protocols and Regional OTEP.

With the support from all of our MPD's, Region Training Coordinator and SEI Instructors, local agency personnel issues and training needs are well handled.

VERIFIED AID & AMBULANCE SERVICES

Current Status

Levels of prehospital care in the Northwest Region vary widely from county to county, but also within each county. Kitsap County is classified as suburban to rural and the other counties located within the region are classified rural to wilderness. As would be expected, higher levels of services are concentrated in the more highly populated areas of the region. Kitsap and Mason counties are the only two counties that have countywide ALS coverage. Many agencies without ALS capabilities have signed Mutual Aid Agreements with nearby agencies to provide ALS service.

Clallam and Jefferson counties have services that range from career paramedics to volunteer BLS agencies with no paid providers. Less populated areas also have problems recruiting and keeping volunteers. In the rural remote areas of the region, the economy is so low that many people have left the area. This means that the pool of potential volunteers is smaller than ever before. This also means that those who remain are called out more frequently and subsequently suffer “burn out” more quickly.

Remote rural emergency medical services and trauma agencies at times can not provide a full ambulance crew of personnel. This requires a 2nd request for personnel tone out to be made by dispatch. Consequently critical time is lost while waiting for enough responders to arrive to safely transport the patient. There are some areas, especially in the West Olympic Peninsula, where the nearest ambulance is forty-five minutes to one hour away. Adding up discovery time, activation of the EMS system, response of the volunteer crews to the ambulance station can easily result in an hour and fifteen-minute wait for and EMS agency to arrive on scene.

The Northwest Region is a popular tourist destination area. The seasonal influx of tourist greatly stresses small rural volunteer emergency medical services. Tourists experience increased hazards, being unfamiliar with the roads/highways, terrain and unexpected rapid weather changes.

In the past, levels of service in rural remote areas were usually BLS, with possibly, a few IV Technicians or Airway technicians. With the advent of the Intermediate Life Support (ILS) certification, higher levels of trained personnel are now available in these areas. Thirteen providers from West Olympic Peninsula, Neah Bay, and Jefferson County have completed ILS training. This allows for a higher degree of trauma patient care on scene and during transport to a receiving facility. ILS courses will be conducted during the upcoming fiscal year.

Low call volume is also a problem facing many remote and rural area providers. It is difficult to maintain a high skill level if call volumes are very low. BLS providers rely on classroom training to keep their skills sharp. This can be demoralizing to volunteers who have the skills to act in an emergency and have few opportunities to utilize them. Jefferson County EMS Council has begun a system to ensure all providers keep there patient exposure and skills current. This is being done by setting minimum number patient contacts/calls providers respond to. Pairing inexperienced providers with experienced ALS providers and scheduling volunteer “ride along” shifts meets this goal.

Other County EMS Councils in the Northwest Region are considering establishing similar programs.

Jefferson County has adjusted their min/max numbers to allow for an ALS service at Port Townsend Fire Department. Port Townsend Fire was under the impression that they already held an ALS Ambulance license, which was incorrect. Paperwork has been submitted to the Department of Health and has been referred to the Northwest Region EMS and Trauma Care Council for a recommendation.

Mason County has also requested a min/max change. BLS Ambulance is being adjusted by one since the licensure change of Mason County FD #4 from an aid to a transport ambulance. This change has been approved by the Department of Health. Currently all entities within Mason County are licensed as verified agencies. Projections within the county are that in three to five years, increases in responses and population will require that BLS Aid units step up to BLS Ambulance licenses.

These changes also incorporate the standard set by the Steering Committee of projecting the maximum of one over the minimum to allow for future growth and changes in services.

Need for Distribution of Service (Geography of the Area to Be Served)

Due to the geography of the Northwest Region, patient transportation can be impacted by many factors at any time of the year. Storms not only affect power systems but also cause road slides, fallen tress and/or flooding blocking our roads. Alternate routes and destinations are dependent upon which roads or highways are passable at that particular time.

Highway 166 between Gorst and Port Orchard is routinely closed for several winter months due to mud slides. At this time, the Washington State Department of Highways has scheduled another attempt to stabilize this hillside in an effort to avoid future slides.

Several Highway 101 mud slides effectively cut-off north Mason County from south Mason County allowing for only one lane of travel in that area. During complete closures a unit is manned by a Mason County Medic One ALS Paramedic on the north side of the slide in Mason County at Eldon. Airlift or Army MAST helicopter assists with air transport services.

Major accidents can block access on critical thoroughfares for hours if it warrants an investigation.

The upcoming 2006 Hood Canal Bridge Repair Project has prompted a Project Impact Assessment by the Washington State Department of Transportation and Department of Public Works because the bridge is expected to be closed for approximately four to six months. The expected closure of the Hood Canal Bridge affects all of the Northwest Region Counties Emergency Medical Services. Planning for the tremendous impact of this loss of a vital thoroughfare has begun. Meetings included parties which will be impacted (fire services, hospitals, commuter transportation resources, schools ect...)

have been held to address the specific foreseeable needs will arise during the bridge closure. The Impact Assessment is currently being conducted.

The Northwest Regional EMS & Trauma Care Council is involved with compiling impact information and planning. Thus this office will be kept abreast of the results as conclusions are reached. This Regional office will then inform the hospitals and EMS agencies within our region of the needs, problems and solution findings.

The result of this impact study will be the creation of a comprehensive contingency plan that can be implemented in unexpected emergent situations similar to the temporary Hood Canal Bridge closure.

CLALLAM COUNTY

Situated on the northern extension of the Olympic Peninsula in Western Washington, roughly half of Clallam County is surrounded by water. To its north and west lie the Strait of Juan de Fuca and Pacific Ocean, respectively. Further north across the Strait is the Canadian territory of Vancouver Island, British Columbia. The county's only land-bound border is shared with Jefferson County to the south and east. Roughly half of Clallam County, including most of its Pacific shoreline, is designated as part of the Olympic National Park or Olympic National Forest.

Covering a geographic area of 1,739.5 square miles, or just over 2.6 percent of the state's total land area, Clallam County ranks 20th in land mass among Washington counties.

The extremely varied terrain of Clallam County is considered some of the most scenic in the country. The county's Pacific coastline is comprised of rugged and windswept beaches, bays, terraces and deltas. The county's northern shore, though protected from extreme wind and weather by the Strait of Juan de Fuca, is topographically similar. Along the Bogachiel River in southwest Clallam County, thick jungles of evergreens and undergrowth from nontropical rain forests at the base of the Olympic Mountains.

Still in relative proximity to the coast, the terrain ascends rapidly as it reaches the Olympic Mountain range, which climbs to approximately 7,000 feet above sea level. Within this range lie Mount Carrie (6,995 feet) and Hurricane Ridge ---the highest elevations in the county.

Clallam County	
Land Area	1739.5 square miles
Land Area in Incorporated Area	18.41 square miles
Land Area in Unincorporated Area	1721.09 square miles
Total Population	64,900
Population Density	37.31 people per square mile
Population - Incorporated	25,930
Population - Unincorporated	38,970
Licensed Drivers	50,961

The prehospital response system in Clallam County is divided into nine areas. These areas include five fire districts, the City of Port Angeles, Olympic National Park (ONP), a hospital district and a Native American Indian Nation. The levels of care vary greatly across the county.

Clallam County Fire District #2 surrounds the City of Port Angeles on three sides and provides BLS response and contracts with a private company to provide ALS and transportation to Olympic Memorial Hospital in Port Angeles. The district has three aid vehicles housed, one in each of its stations. One of these vehicles is used as a backup for transportation if all other transport units are out of service. They also have contracted with a private ambulance company to have one ambulance as a back up in the event the first out is on another call. BLS response time is in the 7-9 minute range

while ALS takes 20-25 minutes to respond to the edges of the district. This district is classified rural and wilderness. Even with the long responses to the extreme edges of the district, ALS responders do meet the rural response time requirement at least 80% of the time.

At the east end of the county, Clallam County Fire District #3 provides ALS service for the entire district by utilizing two on-duty paramedics 24 hours a day, seven days a week. These paramedics are based at the Headquarters Station and one other station located in Sequim. The district provides ALS response with an EMT driver and a Paramedic in a non-transport vehicle. Transportation services are contracted to a private ambulance company. The Paramedic places the patient and necessary equipment into a private ambulance and the Paramedic and patient are transported to Olympic Memorial Hospital (OMH) in Port Angeles. The district has eight aid vehicles, which are placed throughout the district and respond when an aid call is dispatched in their response area. These vehicles can be used for transport in the event of a Mass Casualty Incident. This agency is classified rural and wilderness.

Clallam County Fire District #4 provides BLS service to the residents and visitors of its district, which covers, Highway 112 between Port Angeles and Clallam Bay. Response time to the edges of their district is based on volunteer response time to the only station in the district and availability of personnel to respond. A second fire station is now under construction. Two ambulances, both located in the same station, provide BLS transportation. They cover from the west edge of Clallam County Fire District #2 on the east to the Clallam County Fire District #4 boundary at Schmidt Road on the west and south to almost the intersection of Highway 101. This area is classified rural to wilderness.

Clallam County Fire District #5 serves the Clallam Bay area. Response times to the edges of this district are based on volunteer response time to the only station in the district and availability of personnel to respond. They have two ambulances, both located in the same station, to provide BLS transportation. This area has been classified rural to wilderness.

Port Angeles Fire Department provides both ALS and BLS response from the same facility located in the north central portion of the city. They have three transport vehicles, which include three ALS ambulances. The same local private ambulance company that provides ALS response for Clallam Fire District #2 and Olympic National Park executes BLS transports.

Forks Hospital provides BLS and ILS technicians when those volunteers are available. Their area covers from the west end of Lake Crescent along Highway 101 on south into West Jefferson County to the Grays Harbor County line. This area covers over 2,000 square miles, a large response area for one agency. Based on the volunteer response to a call, the ambulance may require up to an hour to reach the extreme southern portion of their area. This is a result of the distance from the hospital to the south edge of the response area. They have four licensed ambulances, all based at the hospital in Forks. As a result of low resident population and subsequently low call volumes, it is not feasible at this time to station any other units further north or south of the existing units.

Neah Bay Tribal Council provides BLS ambulance service to residents and visitors of Neah Bay as well as the surrounding areas along the coast east to Clallam Bay. Using one paid director and a volunteer response crew they can be to the extreme reaches of their area in 15 to 20 minutes. The Tribal Council has two ambulances to provide BLS with some IV & Airway capable transportation.

The Olympic National Park (ONP) covers over one million acres and is located in all counties of the Northwest Region except Kitsap. ONP uses EMT's to provide BLS to park visitors. Only the outside edge of the park has roads. The other areas are accessible only on foot or by air. A response into the wilderness area can be from 30 minutes to a full day depending on weather and location of the incident. Olympic National Park contracts with a private ambulance agency to provide transportation to the nearest healthcare facility for the injured and ill requiring transport. This area is considered extreme wilderness to remote.

Population by Age and Gender – Clallam County

Age	Total Population	Males	Females
0-14	11,186	5,737	5,449
15-24	7,458	4,090	3,369
25-44	14,055	7,018	7,037
45-64	18,422	8,996	9,427
65+	13,778	6,242	7,535
Total	64,899	32,083	32,817

CLALLAM COUNTY EMS & TRAUMA CARE LICENSED PROVIIDER AGENCIES

AGENCY	AGENCY #	VERIFICATION STATUS	AMBULANCES	AID UNITS
CCFD #2	05D02	BLS AID	2	1
CCFD #3	05D03	ALS AID	0	7
CCFD #4	05D04	BLS AMBULANCE	2	0
CCFD #5	05D05	BLS AMBULANCE	2	0
Port Angeles Fire Department	05M03	ALS AMBULANCE	3	2
Ray Ellis Ambulance	05X01	BLS AMBULANCE	3	0
Olympic Ambulance	05X03	ALS AMBULANCE	5	0
Neah Bay Ambulance	05X04	BLS AMBULANCE	2	0
TOTALS			**19**	**10**

***Agency Codes**: C = County, D = Fire District, M = Municipal Fire Department*
S = State/Federal Agency, X = Private Agency

AGENCY	*AGENCY #*	*ALS TRANSPORTS*	*BLS TRANSPORTS*
CCFD #2	05D02	Olympic Ambulance	Olympic Ambulance
CCFD #3	05D03	Olympic Ambulance	Olympic Ambulance
CCFD #4	05D04	CC FD #4	CCFD #4
CCFD #5	05D05	CCFD #5	CCFD #5
Port Angeles Fire Dept	05M03	Port Angeles FD	Port Angeles FD
Clallam County Hospital Dist #1	05X01	Ray Ellis Ambulance	Ray Ellis Ambulance
Neah Bay EMS	05X02	Neah Bay EMS	Neah Bay EMS

Future Needs

Neah Bay EMS currently uses the Neah Bay Clinic as their ALS support when necessary. Makah Council members, Neah Bay Clinic doctors and nursing staff are working with the MPD and Neah Bay Ambulance staff in developing strategies that will minimize the twenty-four hour obligation of staff doctors and maximize patient care. One such strategy, that has been proven successful in like communities, is after-hour triage rotation by nurses. Resident education as to when to call or not to call 9-1-1 is also a high priority.

A recent realignment of MPD services for Clallam County has greatly benefited providers in the West Olympic Peninsula EMS region. Dr. Sandra Smith-Poling, MPD for Jefferson County, is now the MPD for West Olympic Peninsula EMS. Jefferson County utilizes ILS providers as does West Olympic Peninsula. This change has enhanced EMS coverage in the area.

CLALLAM COUNTY		
AID SERVICES		
	Minimum Number of Services	**Maximum Number of Services**
BLS	1	2
ILS	0	0
ALS	1	2
TRANSPORT SERVICES		
	Minimum Number of Services	**Maximum Number of Services**
BLS	5	6
ILS	0	0
ALS	2	3

JEFFERSON COUNTY

Jefferson County is comprised of 1,808.8 square miles of total landmass, which ranks it the 18th largest county in Washington. It is situated in the upper half of the Olympic Peninsula of northwest Washington. It is bound to the north by Clallam County, to the south by Grays Harbor and Mason counties, and to the west by the Pacific Ocean. Jefferson County's eastern boundary also faces water, though in a unique way. Had the county taken the shape of a more or less normal rectangle, its eastern shoreline would have abutted only Hood Canal. However, its jurisdiction continues up to the northeastern corner of the peninsula in the form of a panhandle that is often assumed to be part of Clallam County (including Port Townsend and most of the other populated areas of the county). This unusual configuration of land extends the county's water access to Admiralty Inlet and the Strait of Juan de Fuca.

Jefferson County's topography is best described in terms of highlands and lowlands. The highlands are mostly rugged, mountainous terrain covered by dense stands of Douglas fir. In fact, about three-quarters of the county's land mass falls within the Olympic National Park and Olympic National Forest systems. Inasmuch as the Olympic Mountains run through the middle of the county, elevations in this part of the county reach lofty heights. The higher peaks include Mount Olympus (7,965 feet above sea level), Mount Constance (7,743 feet above sea level), Mount Anderson (7,321 feet above sea level), and Mount Seattle (6,246 feet above sea level). Jefferson County's lowlands exist at its western and eastern reaches where land meets water. The county's western shore (also part of the Olympic National Park system) is among the peninsulas most scenic areas. The windswept coastline features rock formations set amidst the surf and pebbly beaches. Just offshore is an array of tidelands teeming with a host of shellfish and waterfowl. The western shore is also where three principal rivers -- Hoh, Queets, and Clearwater flow into the Pacific.

The lower half of Jefferson County's eastern shoreline is part of the Olympic National Forest. Consequently, the land is forested as it runs to the edge of Hood Canal. The upper half of the shore particularly where it extends into Admiralty Inlet is full of rich valleys leading up to steep and rocky cliffs pounded by wind and waves. Offering protection from the elements are several deep-water harbors. The main tributaries in the eastern half of the county include the Dosewallips, Duckabush, Quilcene, and Little Quilcene rivers.

Jefferson County	
Land Area	1,814.2 square miles
Land Area in Incorporated Area	6.02 square miles
Land Area in Unincorporated Area	1808.18 square miles
Total Population	26,600
Population Density	14.66 people per square mile
Population - Incorporated	8,455
Population - Unincorporated	18,145
Licensed Drivers	22,041

Jefferson has eight EMS response agencies, which serve the eastern portion of the county. The Olympic National Park occupies the south and most of the western portion of the county.

Jefferson County Fire District #1 covers the area between Port Ludlow and Port Townsend. Marrowstone Volunteer Ambulance a non-profit group disbanded during 2000. The population on Marrowstone Island is low except during the summer months when many people occupy summer cabins and the State Park is in full operation.

Jefferson County Fire District #2 covers the Quilcene/Coyle Peninsula area. Coyle is a sparsely populated area except in the summer months and on weekends. Quilcene, because of its location on Highway 101 sees a lot of motor vehicle collision trauma. Coyle has one ambulance to provide BLS transportation and Quilcene has two ambulances to provide IV & Airway Technician for transportation. There is also a National Forest Service Multipurpose Recreation Area in the district that has generated trauma calls related to off road motorized two and four-wheel vehicles.

Jefferson County Fire District #3 covers the eastern most portion of the county including Highway 104 the main east to west route through the county that connects Kitsap County on the east to Highway 101 on the west. They have three ALS Paramedic & two Aid units. The district has seen a large increase in population, particularly, retirees in the Port Ludlow area. This has resulted in an increase in the type of calls generated by an older population.

Jefferson County Fire District #4 covers the area from south of Jefferson County Fire District #2 to the Mason County line. This is a system staffed by all volunteers, which provides BLS transportation with two ambulances. Its location along Highway 101 means it also responds to a lot of motor vehicle collision trauma. They too are impacted by the tourist season that begins in March and continues through November in this area.

Jefferson County Fire District #5, located at the western edge of the eastern part of Jefferson County, wraps around Discovery Bay. The district, because of its location along one of the most dangerous stretches of Highway 101, gets called out many times a year to medical emergencies and trauma calls involving people who are not residents of the district or even of the county. The district has an Inter-local Agreement with Clallam County Fire District #3 for ALS service. The district provides BLS transportation with two ambulances.

Jefferson County Fire District #6 adjoins Port Townsend and provides BLS Aid unit service by staffed with volunteers. They have no transportation capability. ALS and transportation services are contracted by Jefferson County Fire District #6 from Port Townsend Fire Department.

Port Townsend Fire Department presently has ALS on a part-time basis. They can expand their resources at times by having off duty paramedic respond to calls when available. They have two ambulances. Paramedics from Port Townsend will rendezvous with an incoming BLS unit just outside the city limits to aid with critically ill or injured patients when an additional Paramedic is not available to respond.

Population by Age and Gender – Jefferson County			
Age	**Total Population**	**Males**	**Females**
0-14	4,033	2,022	2,011
15-24	2,443	1,318	1,125
25-44	5,653	2,822	2,831
45-64	8,997	4,365	4,635
65+	5,474	2,674	2,799
Total	**26,600**	**13,201**	**13,401**

JEFFERSON COUNTY EMS & TRAUMA CARE LICENSED PROVIIDER AGENCIES

AGENCY	AGENCY #	VERIFICATION STATUS	AMBULANCES	AID UNITS
JCFD #1	16D01	ALS AMBULANCE	3	0
JCFD #2	16D02	BLS AMBULANCE	3	0
JCFD #3	16D03	ALS AMBULANCE	2	2
JCFD#4	16D04	BLS AMBULANCE	2	0
JCFD#5	16D05	BLS AMBULANCE	2	1
JCFD#6	16D06	BLS AID	0	1
Port Townsend Fire Department	16M01	BLS AMBULANCE	2	1
TOTALS			**14**	**5**

***Agency Codes**: C = County, D = Fire District, M = Municipal Fire Department, S = State/Federal Agency, X = Private Agency*

AGENCY	**AGENCY**	**ALS TRANSPORTS**	**BLS TRANSPORTS**
JCFD #1	16D01	Jefferson County FD1	Jefferson County FD1
JCFD #2	16D02	Jefferson County FD2	Jefferson County FD2
JCFD #3	16D03	Jefferson County FD3	Jefferson County FD3
JCFD #4	16D04	Mason County Medic One & Jefferson County Medic 13	Jefferson County FD4
JCFD #5	16D05	Jefferson County Medic 13 & Clallam County FD3	Jefferson County FD5
JCFD #6	15D06	Jefferson County FD6	Jefferson County FD6
Port Townsend Fire Department	16M01	Port Townsend Fire Dept	Port Townsend Fire Dept

Future Needs

As in other counties, a high priority for Jefferson County is the ability to hire additional permanent staff and the retention and addition of volunteers. This is a necessity to maintain the current level of service with the expected increase of call volume.

JEFFERSON COUNTY		
AID SERVICES		
	Minimum Number of Services	**Maximum Number of Services**
BLS	1	2
ILS	0	1
ALS	0	0
TRANSPORT SERVICES		
	Minimum Number of Services	**Maximum Number of Services**
BLS	5	6
ILS	1	2
ALS	3	5

KITSAP COUNTY

Kitsap County is situated along the western shore of the central Puget Sound region. It comprises a total landmass of 393 square miles (or 0.6 percent of the state's total land mass). As such, Kitsap County ranks 36th in size among Washington counties.

Because of its relatively water-bound situation, Kitsap County is physically connected only to Mason County by virtue of a land bridge at its southwest corner. To the north of Kitsap County across Admiralty Inlet (at the mouth of Puget Sound) is Island County; to its east across the main body of Puget Sound are parts of King, Pierce and Snohomish counties; and to its south across The Narrows is Pierce County.

The Kitsap County area as all of Puget Sound was formed eons ago by glacial activity. In Kitsap County, the result was a terrain comprised of low, rolling hills, flat-topped ridges and plateaus. Inlets, lakes, and valleys separate these land areas. The county's shoreline is generally one of moderate to steep irregular cliffs.

Kitsap County	
Land Area	396 square miles
Land Area in Incorporated Area	63.7 square miles
Land Area in Unincorporated Area	332.3 square miles
Total Population	234,700
Population Density	592.72 people per square mile
Population - Incorporated	73,355
Population - Unincorporated	161,345
Licensed Drivers	170,889

Kitsap is one of two counties in the Northwest Region that has ALS available countywide. There are six ALS agencies in Kitsap County. All ALS districts act as backup for each other when a unit is out of service.

Bremerton Fire provides ALS for the City of Bremerton and, mutual aid services to the south end of Central Kitsap Fire and Rescue. Kitsap County Fire District Number 7, Bainbridge Island Fire Department/KCFD #2, Poulsbo Fire Department, Central Kitsap Fire & Rescue and North Kitsap Fire & Rescue provide ALS and BLS for their districts.

North Kitsap Fire Rescue provides all EMS services for the Little Boston Fire Department on the S'klallam Indian Nation reservation. Kitsap County Fire District #14 has merged with North Kitsap Fire & Rescue.
Civil service and military EMS providers primarily provide BLS services for Naval facilities. ALS services are provided by county ALS agencies. All Naval branches actively support the Kitsap County EMS system.

Poulsbo Fire Department, which surrounds Poulsbo, is just south of North Kitsap Fire & Rescue and provides ALS services with three Paramedic units and two aid vehicles. Poulsbo Fire Department provides ALS for Port Gamble.

Bainbridge Island Fire Department/Kitsap County Fire District #2 provides ALS services with two Paramedic units.

Central Kitsap Fire & Rescue has recently built a new headquarters building on Newberry Hill Road in Silverdale and provides ALS services with three Paramedic units and multiple BLS units. Kitsap County Fire District #12 has merged with Central Kitsap Fire & Rescue.

The City of Bremerton provides ALS services with three Paramedics and BLS transports are rotated through two private ambulance services located within the county.

Population By Age and Gender—Kitsap County

Age	Total Population	Males	Females
0-14	50,671	26,152	24,518
15-24	33,183	18,156	15,027
25-44	67,098	34,520	32,578
45-64	58,940	29,417	29,523
65+	24,808	10,692	14,117
Total	**234,700**	**118,937**	**115,763**

KITSAP COUNTY EMS & TRAUMA CARE LICENSED PROVIIDER AGENCIES

AGENCY	AGENCY #	VERIFICATION STATUS	AMBULANCES	AID UNITS
Central Kitsap Fire & Rescue	18D01	ALS AMBULANCE	8	0
Bainbridge Island Fire Department	18D02	ALS AMBULANCE	4	0
KCFD #7	18D07	ALS AMBULANCE	7	0
North Kitsap Fire & Rescue	18D10	ALS AMBULANCE	4	0
Bremerton Fire Department	18M01	ALS AMBULANCE	5	0
Poulsbo Fire Department	18M04	ALS AMBULANCE	6	0
Bainbridge Island Ambulance Association	18X01	BLS AMBULANCE	2	0
Olympic Ambulance	18X03	ALS AMBULANCE	4	0
Bremerton Ambulance	18X04	ALS AMBULANCE	3	0
TOTALS			**43**	**0**

Agency Codes: *C = County, D = Fire District, M = Municipal Fire Department, S = State/Federal Agency, X = Private Agency*

AGENCY	AGENCY #	ALS TRANSPORTS	BLS TRANSPORTS
Central Kitsap Fire & Rescue	18D01	Central Kitsap Fire & Rescue	Central Kitsap Fire & Rescue
Kitsap County FD2	18D02	Kitsap County FD2	Kitsap County FD2, BIAA
Kitsap County FD7	18D07	Kitsap County FD7	Kitsap County FD7
North Kitsap Fire & Rescue	18D10	North Kitsap Fire & Rescue	North Kitsap Fire & Rescue
Bremerton Fire Department	18M01	Bremerton Fire Department	Bremerton/Olympic Ambulance
Poulsbo Fire Department	18M04	Poulsbo Fire Department	Poulsbo Fire Department

Future Needs:

Central Kitsap Fire & Rescue may be looking at the possible relocation of units based on population/activity increases brought about by area population increases and the added population demographics created by recent mergers and annexations. Although they have the highest number of providers within the Northwest Region, they too are experiencing the need for both paid and volunteer personnel.

KITSAP COUNTY		
AID SERVICES		
	Minimum Number of Services	**Maximum Number of Services**
BLS	2	4
ILS	0	1
ALS	0	0
TRANSPORT SERVICES		
	Minimum Number of Services	**Maximum Number of Services**
BLS	5	6
ILS	0	1
ALS	6	7

MASON COUNTY

Mason County, comprising a total landmass of 961 square miles, ranks 29th in size among Washington counties. The county is located in western Washington at the southwest end of Puget Sound. It is bordered to the north by Jefferson County, to the west and southwest by Grays Harbor County, and to the southeast by Thurston County. The county's eastern boundary is shared with Kitsap, Pierce and Thurston counties. Boundaries are delineated by the rugged contours of Hood Canal and Case Inlet.

Like neighboring Thurston County, Mason's topography was heavily influenced by prehistoric glacial activity. After the ice retreated, the more mountainous areas in the county's interior evolved into dense forestland. This is particularly true in the north county, much of which is incorporated in the Olympic National Forest and Olympic National Park (elevations in this part of the county reach 6,000 feet above sea level). The lower elevations (where they are not forested) consist of fertile, but gravelly, loam. Past glacial activity accounts for nearly 100 lakes that dot the county. The larger of these bodies of water are Lake Cushman, Mason Lake, Lake Limerick, Isabella Lake, Timberlakes and Spencer Lake.

Hood Canal and Puget Sound account for most of Mason County's 90 square miles of water. Two-thirds of Hood Canal runs through Mason County, two-to-three miles wide in places. Hood Canal enters the county from the north and, in the course of its 30-plus mile stretch, turns northeasterly at the Great Bend to form a lopsided "V". Case Inlet forms the lower half of Mason's eastern boundary. Lying in county waters are two big islands Harstine and Squaxin along with three smaller ones: Hope, Reach, and Stretch. Of the innumerable inlets that break up the county's shoreline, two deserve mention: Hammersley Inlet (Shelton's access to Puget Sound) and Little Skookum Inlet (Kamilche's access to Puget Sound).

The longest and most powerful river in Mason County is the Skokomish. Formed high in the Olympic Mountains, the Skokomish flows southeasterly through Mason County before emptying at the Great Bend of the Hood Canal. One fork of the Skokomish feeds Lake Cushman and the hydroelectric power plant at Potlatch (built by the City of Tacoma). Other notable rivers in Mason County are the Satsop and Hamma Hamma. Originating in the south county, the Satsop flows southwesterly to Grays Harbor and the Pacific Ocean. The Hamma Hamma runs east near the county's northern border before flowing into Hood Canal.

Mason County	
Land Area	961.1 square miles
Land Area in Incorporated Area	6.26 square miles
Land Area in Unincorporated Area	954.84 square miles
Total Population	49,800
Population Density	51.82 people per square mile
Population - Incorporated	8,495
Population - Unincorporated	41,305
Licensed Drivers	36,757

The Hood Canal naturally divides Mason County creating longer response and travel time to healthcare facilities.

Mason County Fire District #1 is located on the western shore of Hood Canal and follows along the shoreline. Mason County Fire District #1 provides BLS response only. Mason County Medic One provides ALS.

Mason County Fire District #2, which is located in the northeast portion of the county, also shares a boundary line with Kitsap County Fire District #7. The two districts often provide mutual aid when necessary. Mason County Fire District #2 provides ALS services with three Paramedic units.

Mason County Fire District #3 borders Mason County Fire District #5 on three sides. It provides BLS transportation manned by volunteers and one ambulance. Mason County Fire District #5 provides ALS services.
Mason County Fire District #4 is located south of the City of Shelton and its southern boundary abuts with Thurston County. This agency provides BLS response only. Mason County Medic One provides ALS.

Mason County Fire District #5 is south of Mason County Fire District #2 and has more land area than any other district in the county. Mason County Fire District #5 has been providing ALS longer than any other fire district in the county.

Mason County Fire District #6 is located west of Mason County Fire District #5 at the south end of Hood Canal. It also shares a boundary with Mason County Fire District #9 and provides BLS services. Since January 1, 2001, ALS transport has been provided by Mason County Fire District #5.

Mason County Fire District #8 provides BLS response only. ALS is provided through a contract with Mason County Fire Districts #2.

Mason County Fire District #9 is located west of Mason County Fire District #6 and south of Mason County Fire District #1. Mason County Fire District #9 provides BLS response only. Mason County Medic One provides ALS service.

Mason County Fire District #11 is located northwest of the City of Shelton and shares a boundary with Shelton Fire Department. Mason County Medic One provides ALS.

Mason County Fire District #12 is located west of Mason County Fire Districts #13 and 16 and shares a western boundary with Grays Harbor County. Mason County Medic One provides ALS.

Mason County Fire District #13 is located just south of Mason County Fire District #16 and shares a boundary on the south with Thurston County. This district provides BLS response only. Mason County Medic One provides ALS.

Mason County Fire District #16 is located west of the City of Shelton. Mason County Medic One provides ALS.

Mason County Fire District #17 is located north of Mason County Fire District #1 and shares a north boundary with Jefferson County. Mason County Fire District #17 provides BLS response only. Mason County Medic One provides ALS.

Mason County Fire District #18 is located just west of Mason County Fire District # 1 and located around Lake Cushman. This agency became a BLS transport agency during 2000 and provides BLS response and transport. Mason County Medic One provides ALS.

The City of Shelton located in the southeast portion of the county provides BLS services and Mason County Medic One provides ALS services.

Population By Age and Gender—Mason County

Age	Total Population	Males	Females
0-14	9,231	4,770	4,461
15-24	6,159	3,418	2,739
25-44	12,693	6,844	5,846
45-64	13,564	6,808	6,758
65+	8,155	3,906	4,251
Total	49,802	25,746	24,055

MASON COUNTY EMS & TRAUMA CARE LICENSED PROVIIDER AGENCIES

AGENCY	AGENCY #	VERIFICATION STATUS	AMBULANCES	AID UNITS
MCFD #1	23D01	BLS AID	0	1
MCFD #2	23D02	ALS AMBULANCE	4	0
MCFD #3	23D03	BLS AMBULANCE	2	0
MCFD #4	23D04	BLS AMBULANCE	2	3
MCFD #5	23D05	ALS AMBULANCE	3	3
MCFD #6	23D06	BLS AMBULANCE	1	2
MCFD #8	23D08	BLS AMBULANCE	3	0
MCFD #9	23D09	BLS AID	0	2
MCFD #11	23D11	BLS AID	0	1
MCFD #12	23D12	BLS AID	0	1
MCFD #13	23D13	BLS AID	0	3
MCFD #16	23D16	BLS AID	0	1
MCFD #17	23D17	BLS AID	0	2
MCFD #18	23D18	BLS AID	2	2
Shelton Fire Department	23M02	BLS AID	0	4
Mason County Medic One	23X01	ALS AMBULANCE	4	0
TOTALS			**21**	**25**

Agency Codes: *C = County, D = Fire District, M = Municipal Fire Department, S = State/Federal Agency, X = Private Agency*

AGENCY	AGENCY #	ALS TRANSPORTS	BLS TRANSPORTS
Mason County FD1	23D01	Mason County Medic One	Mason County Medic One
Mason County FD2	23D02	Mason County FD2	Mason County FD2
Mason County FD3	23D03	Mason County FD5	Mason County FD3
Mason County FD4	23D04	Mason County Medic One	Mason County FD4
Mason County FD5	23D05	Mason County FD5	Mason County FD5
Mason County FD6	23D06	Mason County FD5	Mason County FD6
Mason County FD8	23D08	Mason County FD2	Mason County FD8
Mason County FD9	23D09	Mason County Medic One	Mason County Medic One
Mason County FD11	23D11	Mason County Medic One	Mason County Medic One
Mason County FD12	23D12	Mason County Medic One	Mason County Medic One
Mason County FD13	23D13	Mason County Medic One	Mason County Medic One
Mason County FD16	23D16	Mason County Medic One	Mason County Medic One
Mason County FD17	23D17	Mason County Medic One	Mason County Medic One
Mason County FD18	23D18	Mason County Medic One	Mason County FD18
Shelton Fire Department	23M02	Mason County Medic One	Mason County Medic One

Future Needs

Currently all entities within Mason County are verified licensed agencies. Projections show that within the next three to five years an increase in responses and population will require that all aid services become BLS ambulance services.

MASON COUNTY		
AID SERVICES		
	Minimum Number of Services	**Maximum Number of Services**
BLS	8	8
ILS	0	0
ALS	0	0
TRANSPORT SERVICES		
	Minimum Number of Services	**Maximum Number of Services**
BLS	5	6
ILS	0	0
ALS	3	3

Appendices 1: Clallam County Fire Boundaries Map

Appendices 2: Jefferson County Fire Boundaries Map

Appendices 3: Kitsap County Fire Boundaries Map

Appendices 4: Mason County Fire Boundaries Map

CLALLAM:

Services	STATE APPROVED		CURRENT STATUS	REGION PROPOSED (Indicate changes with an *)	
	MIN	MAX		MIN	MAX
Aid - BLS	1	2	1	1	2
Aid - ILS	0	0	0	0	0
Aid - ALS	1	2	1	1	2
Amb-BLS	5	6	4	5	6
Amb - ILS	0	0	0	0	0
Amb - ALS	2	3	2	2	3

JEFFERSON:

Services	STATE APPROVED		CURRENT STATUS	REGION PROPOSED (Indicate changes with an *)	
	MIN	MAX		MIN	MAX
Aid - BLS	1	2	1	1	2
Aid - ILS	0	1	0	0	1
Aid - ALS	0	0	0	0	0
Amb-BLS	5	5	4	5	6*
Amb - ILS	1	2	0	1	2
Amb - ALS	2	2	2	3	4*

KITSAP:

Services	STATE APPROVED		CURRENT STATUS	REGION PROPOSED (Indicate changes with an *)	
	MIN	MAX		MIN	MAX
Aid - BLS	2	4	1	2	4
Aid - ILS	0	1	0	0	1
Aid - ALS	0	0	0	0	0
Amb-BLS	5	6	3	5	6
Amb - ILS	0	1	0	0	1
Amb - ALS	5	6	6	5	6

MASON:

Services	STATE APPROVED		CURRENT STATUS	REGION PROPOSED (Indicate changes with an *)	
	MIN	MAX		MIN	MAX
Aid - BLS	8	8	7	8	9*
Aid - ILS	0	0	0	0	0
Aid - ALS	0	0	0	0	0
Amb-BLS	5	6	5	6*	7*
Amb - ILS	0	0	0	0	0
Amb - ALS	3	3	3	3	4*

Strengths
The Northwest Region has much demographic and geographical diversity, considering the limited number of certified personnel have managed quite well with the number of EMS responses region wide. The ratio of ambulance to aid services is such that any given patient is not without transportation to a hospital whether via ground or air service.

Needs
In the urban areas aid and ambulance service responses are quite good, however in the rural to extreme rural and wilderness settings with limited resources, service at both levels can always use improvement. The high attrition rate and lack of good recruitment has taxed current personnel in many areas, this needs to be looked at and improved so future service is not jeopardized.

Goals and Objectives
Improve upon recruitment and retention of certified personnel to improve response region wide. Improve the mutual aid of the fire service and private agencies where EMS service is provided by non fire service agencies. This alone would greatly improve the safety of EMS personnel as well as increase manpower numbers for better patient care. Further assist each county in recognizing population growths in relation to service provided and personnel to provide the service.

The upcoming 2006 Hood Canal Bridge Repair Project has prompted a Project Impact Assessment by the Washington State Department of Transportation and Department of Public Works because the bridge is expected to be closed for approximately four to six months. The expected closure of the Hood Canal Bridge affects all of the Northwest Region Counties Emergency Medical Services. Planning for the tremendous impact of this loss of a vital thoroughfare has begun. Meetings included parties which will be impacted (fire services, hospitals, commuter transportation resources, schools ect...) have been held to address the specific foreseeable needs will arise during the bridge closure. The Impact Assessment is currently being conducted.

The Northwest Regional EMS & Trauma Care Council is involved with compiling impact information and planning. Thus this office will be kept abreast of the results as conclusions are reached. This Regional office will then inform the hospitals and EMS agencies within our region of the needs, problems and solution findings.

The result of this impact study will be the creation of a comprehensive contingency plan that can be implemented in unexpected emergent situations similar to the temporary Hood Canal Bridge closure.

Patient Care Procedures and County Operating Procedures – (See Page 79)
Patient Care Procedures and County Operating Procedures have been included in the Northwest Region Protocols text. Integrating these three important documents into one organized comprehensive text has been very well received agencies and personnel alike. Having one text for reference has greatly minimized errors and confusion. This has also done away with redundancy and is a great savings for everyone involved. The cost of review and revision will be borne by the Northwest Regional EMS and Trauma Care Council through the Northwest Region EMS Training, Education and Development Committee. Printing cost will be charged to the agencies.

Multi County or County/Inter-Regional Pre-hospital Care

The following procedures currently exist in the Northwest Region's Protocols. Complete revisions will occur every two years. Amendments will be made as needed between biennial reviews.

Triage and Transport

The first EMS and trauma providers' on-scene assess the patient(s) for the possibility of activation of the Trauma System by using START Triage, State of Washington Prehospital Trauma Triage (Destination) Procedures and Northwest Region Patient Care Protocols. Upon evaluation of the patient(s) and determination of the need for a trauma team, the Paramedic, EMT, or appropriate medical personnel shall contact medical control at the nearest or most appropriate designated trauma center and request the activation of the Trauma System as needed.

Once identified, trauma patients are banded, treated, transported and trauma data collected as quickly as possible. In all cases, the goal of the Northwest Region Trauma System is to have all major trauma patients delivered to the most appropriate trauma center to meet the needs of the patient within 60 minutes from the time of arrival of EMS on scene of the trauma incident.

Major Trauma Patients

The decision to activate air ambulance service for field response to a major trauma is Made on scene by the highest certified EMS provider in conjunction with on-line medical control consultation. An air ambulance transport is considered for transport by agencies in the Northwest Region when patient needs prohibit transport by ground, unless weather conditions do not allow for such use.

Air ambulance services requested to respond into the Northwest Region will follow their policies for accepting a field mission and their Rotary Wing Primary Service Area criteria.

In western portions of the region flight time for air transport can be up to one hour from the time they leave the Seattle/Tacoma area. In those cases, patients are transported to the nearest receiving facility, while activating air transport. The patient can be stabilized and appropriate treatment can begin while awaiting a rendezvous of with air transport vehicle.

Other Injured Patients

Patients who are not "major trauma" patients will be transported to the most appropriate facility within the prehospital provider's service area. If a patient wants to be taken to a facility outside of the service area of the prehospital provider, the patient will be taken to the nearest appropriate facility; initial stabilization will occur; and then a transfer to the facility of choice will occur by an verified inter-facility transfer transport unit.

Medical Patients

Since great distances separate hospitals located within the Northwest Region, transports for medical patients is usually to the closest receiving facility with few exceptions. These exceptions are usually based on patient or family wishes for final destination.

Special Needs Patients
Special needs patients are accommodated for and taken to the nearest facility and then transfer arrangements are made on a case-by-case basis based on individual patient needs.

Out of Region Pre-Hospital Care
Patients transferred out of any local base coverage area (from either the base hospital or the field) are initially the responsibility of local on-line medical control. Prehospital personnel follow local prehospital protocols. Initial orders, which are consistent with local prehospital protocols, are obtained from base station on-line medical control.

When the transport service crosses into destination jurisdiction, the destination on-line medical control is contacted and given the following information:

1. Brief history
2. Pertinent physical findings
3. Summary of treatment (per protocols and per orders from base medical control)
4. Response to treatment
5. Current condition

The destination medical control physician may add further orders provided they are within the legal scope of practice of the transport personnel.

The nearest trauma center base station will be contacted during the transport should the patient's condition deteriorates and/or assistance is needed. The transport unit may divert to the closest trauma center as dictated by the patient's condition.

Needs
The Northwest Region, like other regions has the continued problem of normal attrition as well as the loss of personnel due to increasing demands on training requirements, equipment specifications and an overall increase in the time to maintain certification. Increased loss in funding makes the retention, recruitment, and glory of EMS service difficult, especially in a predominately volunteer community where time away from the family has become a way of life to protect and serve their communities. The dedicated personnel with of the Northwest Region have proven to be up to the challenge of service. It is our responsibility to support these exemplary people.

Goals & Objectives
Overall the Northwest Region's prehospital EMS system is established and functioning well. From communications to training to patient care, the region and its components are continually striving to provide quality care for our citizens. To the best of our ability Northwest Regional EMS & Trauma Care Council will address identified areas in prehospital care that are continually evolving. Region wide understanding and upgrade of communication systems so that all geographic areas can communicate will

strengthen the foundation of the existing EMS system. Through communication with each agency within the Northwest Region, we will survey, evaluate and determine how improvements can be accomplished and what resources are needed to make them a reality.

V. DESIGNATED TRAUMA CARE SERVICE

There are five hospitals in the region that the public can access for emergency healthcare. The five are evenly spaced throughout the region and each has their own catchments area. Each also serves as the area base station respectively.

Forks Community Hospital - Forks, Clallam County, is located on the western edge of Clallam County. They also serve part of West Jefferson County. Forks Community Hospital serves as the base station for the EMS System in the Forks and Clallam Bay areas as well as West Jefferson County. Forks Community Hospital is designated as a Level IV Trauma Center. Due to the distance to travel to a higher-level trauma center, most patients are brought to Forks Community Hospital for stabilization transferring out, weather permitting.

There are no surgeons in Forks. Therefore, all surgery cases must be transferred. Most of the less than major trauma cases are transferred to Olympic Memorial Hospital in Port Angeles. Major trauma cases are usually airlifted to Harborview. Flight time to Forks Airport from Seattle is forty-three minutes. Then a forty-three minute return flight back to Harborview eliminates the golden hour for patients.

Prehospital service is BLS with some IV Techs and a few Airway trained individuals. Transfers must be well planned since there are no healthcare facilities located between Forks and Port Angeles. There is no one to assist if the patient's condition deteriorates while enroute to Port Angeles.

The airfield at Forks does not have Instrument Flight Reading (IFR) capabilities; therefore, air ambulances cannot land in inclement weather. The closest airfield that is IFR is in Port Angeles, which requires an additional ninety minutes of ground transport. Ground ambulances must travel Highway 101which can delay the transport or stop it entirely if there is a problem with the road around the Crescent Lake. These problems range from a tree across the road to a rockslide or ice and snow. Olympic National Park staff maintains the road. It takes time to gather the resources to resolve blocking problems. This can take several hours to days to complete. There are no alternate roads around Crescent Lake without backtracking thirty-five miles and accessing Highway 112, which has a tendency to wash out or also become blocked with downed trees.

Olympic Memorial Hospital- Port Angeles, Clallam County, is located at the north edge of the central part of the county. Olympic Memorial Hospital, during the last designation process upgraded from a Level IV to a Level III Trauma Center. Olympic Memorial Hospital serves as the base station for the EMS System of central and eastern Clallam County. They have surgical capabilities that Forks Community Hospital does not have, so they receive many patients from Forks. Like Forks Community Hospital, the distance from Seattle means that major trauma patients are brought to Olympic Memorial Hospital for stabilization and then flown to a higher-level trauma center that meets the needs of the patient. Olympic Memorial Hospital has a helicopter-landing pad on its campus, which facilitates the transfer of patients to the helicopter directly from the Emergency Department.

If weather conditions are poor, the air ambulance can land at the airport in Port Angeles requiring an additional fifteen minutes for ground transport of the patient to the airfield.

The Coast Guard Air Station in Port Angeles also has IFR and can serve as a safe landing site for the air ambulance during poor weather conditions.

Jefferson General Hospital - Port Townsend, Jefferson County. Jefferson General Hospital is a Level IV designated Trauma Center. Jefferson General Hospital serves as medical control for all of East Jefferson County. Jefferson General Hospital is located at the northeast portion of the county. This means that all but the patients originating in Port Townsend must be ground transported from just a few miles to over forty miles over roads that can be closed for a variety of reasons.

Major trauma patients are transferred out to the appropriate hospital in the Seattle area. With the new construction project completed in the fall of 1995, Jefferson General Hospital will have a heliport on the roof of its new facility. This will expedite the transfer of patients from the Emergency Department to the air ambulance.

Air flight time from Seattle to Jefferson General Hospital is fifteen minutes one way under ideal conditions. If the conditions are less than ideal, the patient must be ground transported to Seattle. The airport in Port Townsend is not IFR.

Harrison Memorial Hospital - Bremerton, Kitsap County. Harrison Memorial Hospital is designated as a Level III Trauma Center. Harrison Memorial Hospital is located in Central Kitsap County. Harrison Memorial Hospital serves as the base station for the Kitsap County EMS System.

Harrison Memorial Hospital is the largest hospital in the Northwest Region. All major head and major trauma patients are airlifted directly from the field. It is possible to have an air ambulance on the ground in most of Kitsap County within ten minutes; the exception would be the extreme western edge in the Hood Canal area. This allows for the patient to be at Harborview well within the golden hour provided there is not a prolonged extrication or rescue.

Naval Hospital in Bremerton services active duty military personnel, their dependents and retired personnel. This facility does accept any critical patient if they are the closest receiving hospital. Arrangements for transfer to a civilian hospital are made after the patient is stabilized. In the event of a regional emergency they will take patients if they have manpower and beds available.

Mason General Hospital - Shelton, Mason County. Mason General Hospital is located in the southeastern portion of the county. Mason General Hospital is designated as a Level IV Trauma Center. Mason General Hospital serves as the base station hospital for all of Mason County.

Mason General Hospital has surgeons who treat all but the major trauma patients. Major trauma patients are either brought to Mason General Hospital for stabilization and then airlifted out or flown directly from the field based on the location of the patient and the availability of the air ambulance.
Mason General Hospital has a heliport just outside the Emergency Department, which means the patients are brought directly from the ED to the waiting helicopter. This is an advantage to the patient.

Demographics
Although the Northwest Region sees a great influx in tourist travel each year, currently there are no plans to change levels of designation.

Designated General, Pediatric and Rehabilitation Trauma Facilities
Based on a needs assessment conducted annually and information received from designated trauma facilities, no changes in levels of designation will be required.

HOSPITALS						
	Olympic	***Forks***	***Jefferson***	***Harrison***	***Mason***	**REGION**
LPN	7	6	0	62	13	**88**
RN	198	25	85	478	112	**898**
RT	7	0	4	32	10	**53**
LAB	8	4	10	20	23	**65**
X-RAY	19	3	8	18	27	**75**
TOTALS	***246***	***38***	***107***	***610***	***185***	***1186***

Needs
Hospital Education and Training is almost entirely performed at the individual hospitals in the region. The nursing staff comprises the largest group needing annual training in Continuing Medical Education. Basic Cardiac Life Support (BCLS), Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS), Trauma Nursing Care Course (TNCC) and others are the typical training needed every year or every other year. Physician training is accomplished within the professional medical community, although physicians often participate in ACLS and PALS courses.

An assessment will be conducted to determine the training needs of acute care facility providers and to ensure that all-acute care facility providers region-wide receive the type of trauma training necessary to meet there needs.

Goals & Objectives
The Northwest Region EMS Council will continue to encourage acute care facility providers to participate in trauma education such as approved TNCC, PALS OR ENPC, ACLS and ATLS courses by providing student reimbursement for each class attended. A variety of trauma courses will be offered through the Northwest Region EMS office to help fulfill this need.

The Northwest Region has purchased a Laerdal/AHA approved ACLS Heartcode Interactive Computer System. This program allows an individual convenience and ease in recertification in ACLS onsite at their workplace. One can practice and review all aspects of ACLS objectives and skills in a live interactive program, using live models and up to date therapy. This program significantly reduces the costs for out of area travel. Though this program is not for everyone, as it does not allow live interaction with an instructor, it does however successfully evaluate individual skills as in a live course. As requested by a training site the regional training coordinator, an ACLS Instructor, can accompany the system and give instruction on its use as well as instructor interaction as in traditional courses.

Rural outlying areas of our region have benefited greatly form the use of this interactive system. It is the Northwest Regional EMS & Trauma Care Council's goal to develop and/or search creative solutions to meet the needs of our regions healthcare providers.

TABLE C

NORTHWEST REGION

FY 04/05 Regional Plan

Min/Max Numbers for Acute Trauma Services

LEVEL	STATE APPROVED		CURRENT STATUS	REGION PROPOSED (Indicate changes with an *)	
	MIN	MAX		MIN	MAX
II	1	1	0	1	1
III	2	2	2	2	2
IV	2	3	3	2	3
V	3	4	0	3	4
IIP	0	0	0	0	0
IIIP	1	1	0	1	1

Min/Max Numbers for Rehabilitation Trauma Services

LEVEL	STATE APPROVED		CURRENT STATUS	REGION PROPOSED (Indicate changes with an *)	
	MIN	MAX		MIN	MAX
II	0	0	0	0	0
III+	0	0	1	0	0

\+ *There are no restrictions on the number of Level III Rehab Services*

NOTE: Include a narrative discussion explaining the region's rationale or justification for recommended changes.

VI. DATA COLLECTION AND SUBMISSION

DATA COLLECTION AND SUBMISSION

Issue
It is each agencies responsibility to collect and submit data into the appropriate databases, however the Northwest Region will assist them with information on collector training and referrals to DOH staff for assistance if needed. It is the mission of the Northwest Region to continue promoting and assisting regional agencies in the data collection and submission process.

Need
We need more thorough databases in place in order to contribute the maximum amount of usable data for collection and analysis.

Strengths
Currently, the agencies in our region submit trauma data to the state; generally this is done through the local hospitals and has been completed fairly successfully. In addition, agencies that will be receiving AEDs through the state grant will be required to contribute data to the Washington Regional EMS Data Standards Project/Cardiac Arrest Database. We have also made the agencies in our Region aware of Duane Mariotti's Hospital Capacity website and each agency has been encouraged to contact Duane and participate in this database if appropriate.

Weaknesses
The data collection process is in constant flux. In addition to a limited amount of databases with which to report a wide-ranging amount of EMS-related data, many of our rural agencies do not have the technical capabilities or the manpower to participate in extensive data collection projects.

Goal
The goal of the Northwest Region is to promote 100% compliance in reporting data so that data returned to the Region will be accurate and can contribute to the future direction of the Region. This data can then be effectively used as a basis for our Prevention and Training Programs as well as for our future trauma plans.

VII. EMS AND TRAUMA SYSTEM EVALUATION

Effectiveness And Quality Assurance

Each county within the region has an effective peer review and/or evaluation program that is conducted monthly. Case reviews are discussed at a committee level and then problems or accolades are referred to the MPD or county QI Coordinator, when applicable.

A Northwest Region QI Committee was developed in 1997 and a Northwest Region QI Plan was completed and submitted to DOH in June of l997.

This committee's membership consists of representatives from each hospital located in the region, prehospital representatives from county agencies, MPD's and lay persons involved within the EMS system. The Northwest Region QA Committee meets prior to Northwest Region EMS Council meetings to review prehospital and hospital cases. Committee members also attend an annual retreat. Case reviews and guest speakers are included on the retreat agenda.

Weakness

The current weakness of the system is the unavailability of good data. Although, reporting of data is improving each reporting cycle.

Strength

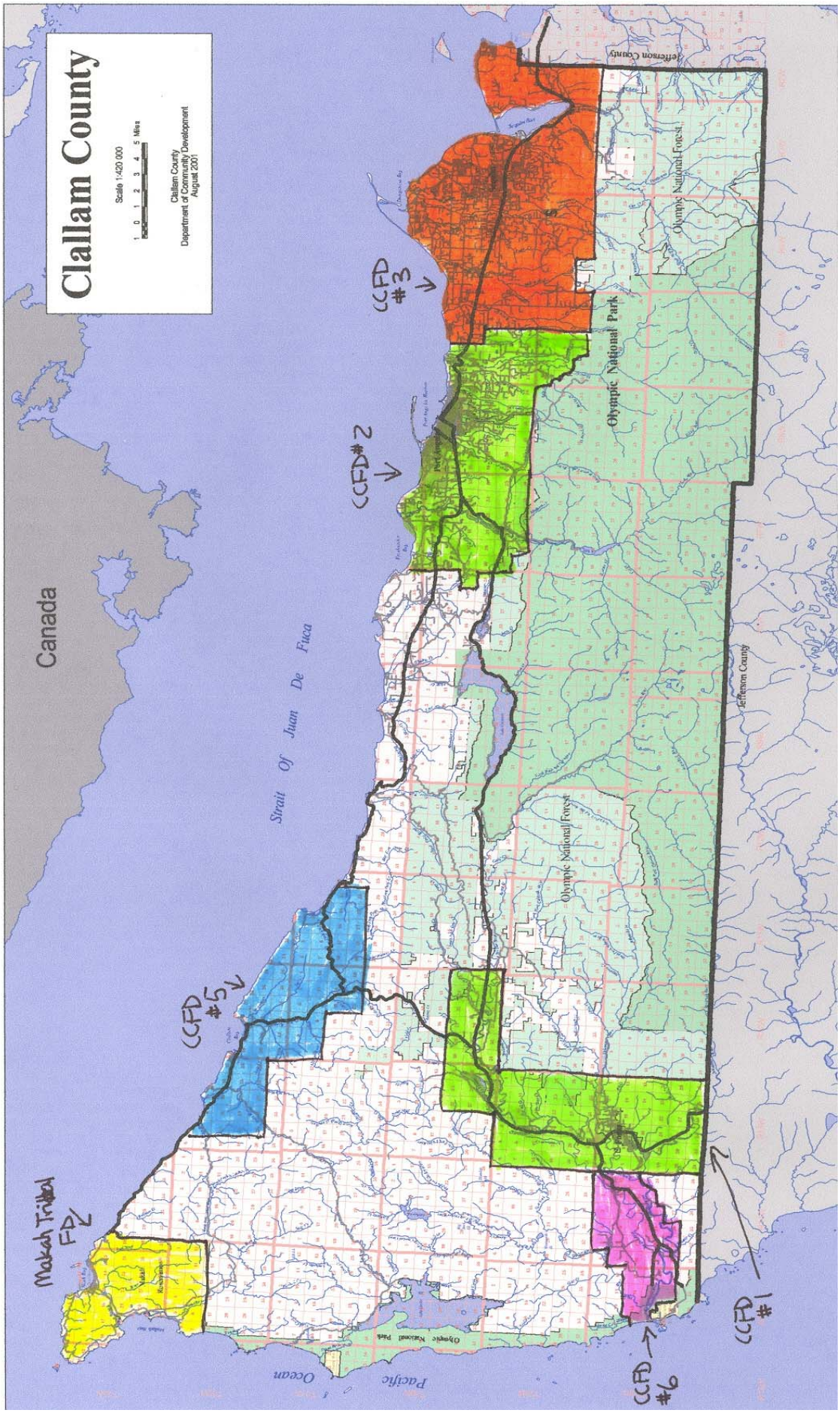
The Northwest Region EMS system is a very strong and good system. We have led the state in OTEP training and the implementation of Regional Protocols. With the input of strong supportable personnel we will be able to continue to focus on providing the best care available.

Goal

Our goal is to continue to lead the state in EMS services by thinking "outside" the box and by using available information and data to not only improve our EMS system but to always move forward is this ever evolving industry.

Submitted by: ***Date:***

APPENDICES 1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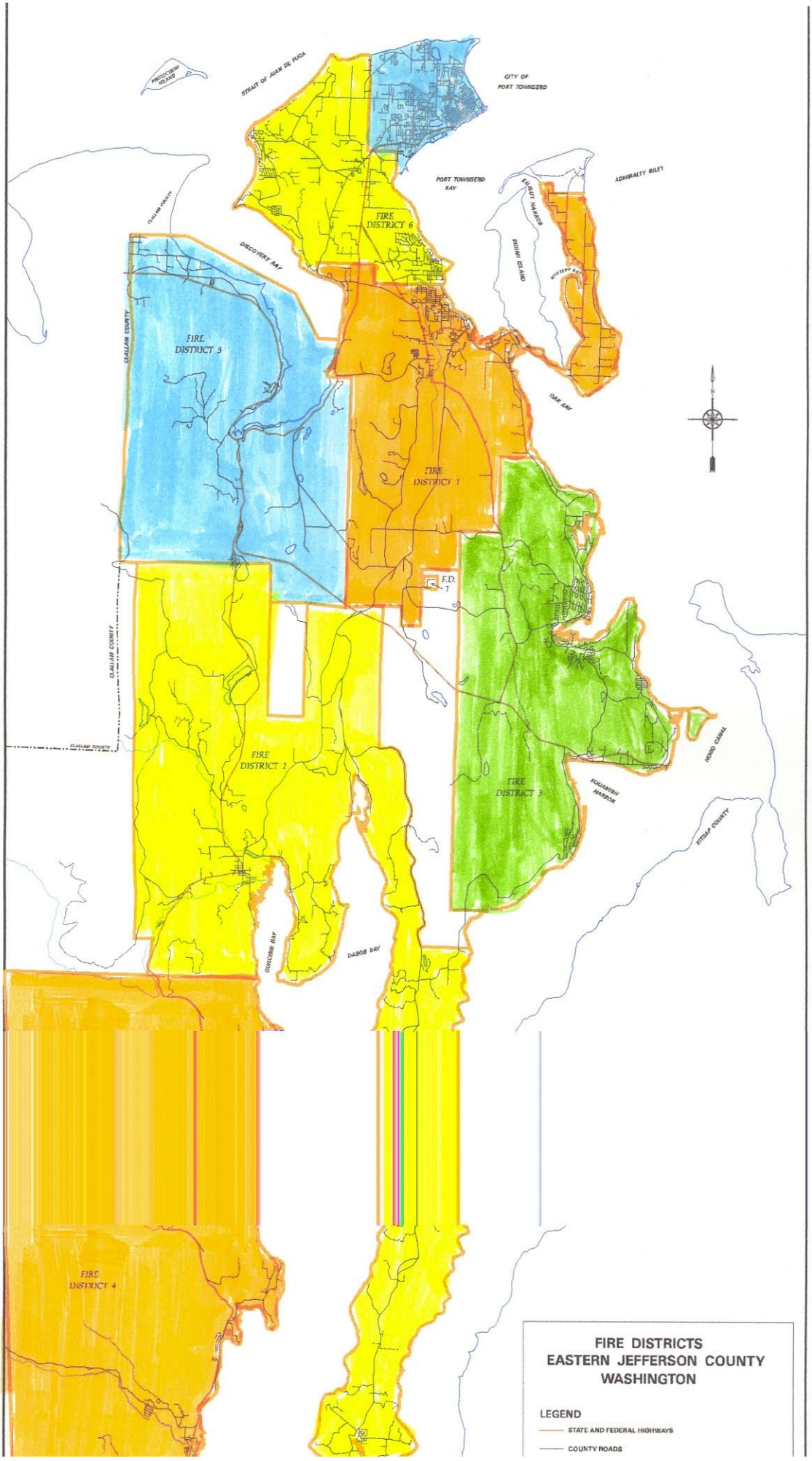
Clallam County
Department of Community Development
August 2001
Canada
Strait Of Juan De Fuca
Pacific Ocean
Olympic National Park
Olympic National Forest
Jefferson County
CCFD #3
CCFD #2
CCFD #5
CCFD #1
CCFD #6
Makah Tribal FD

APPENDICES 2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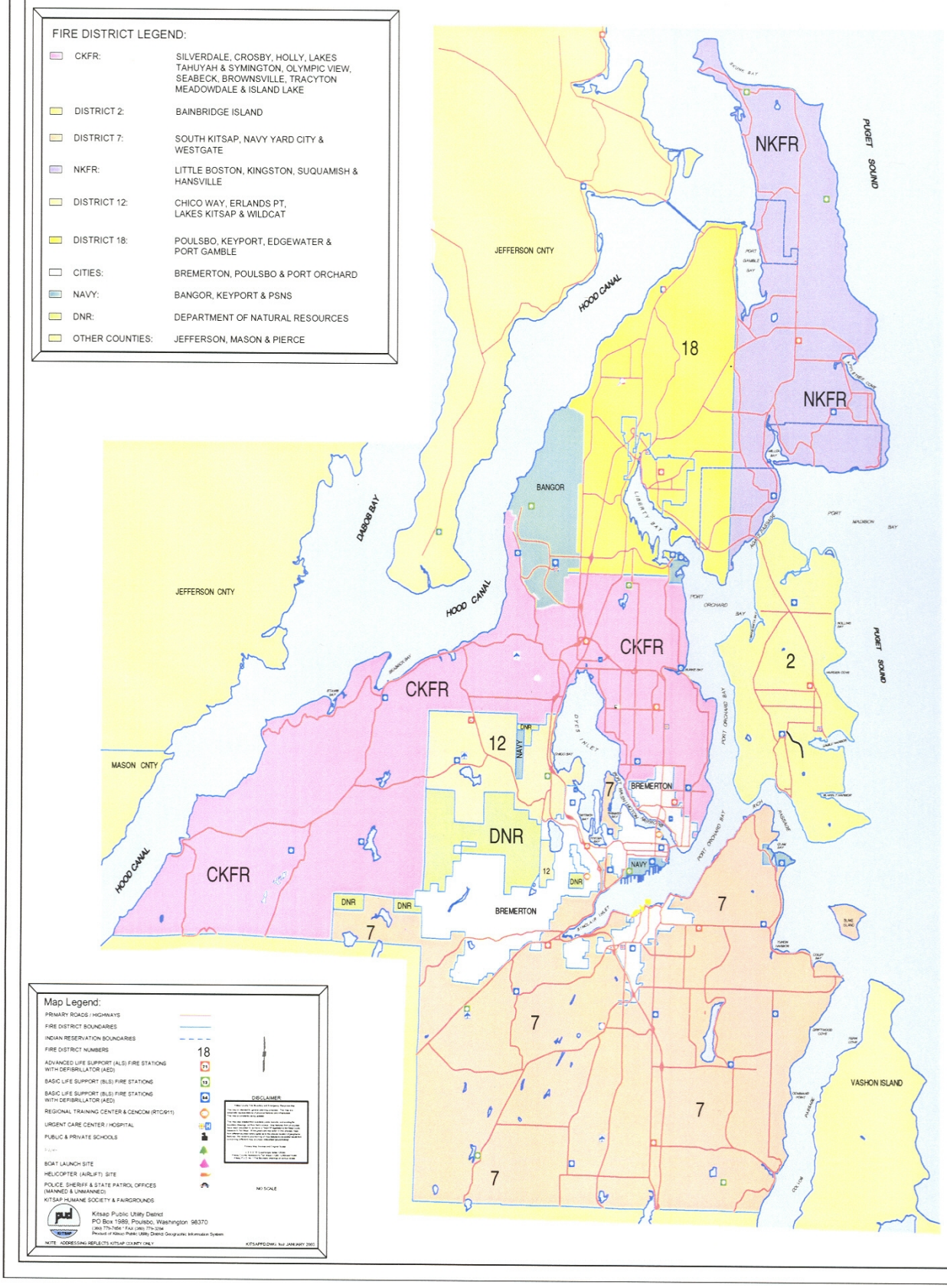
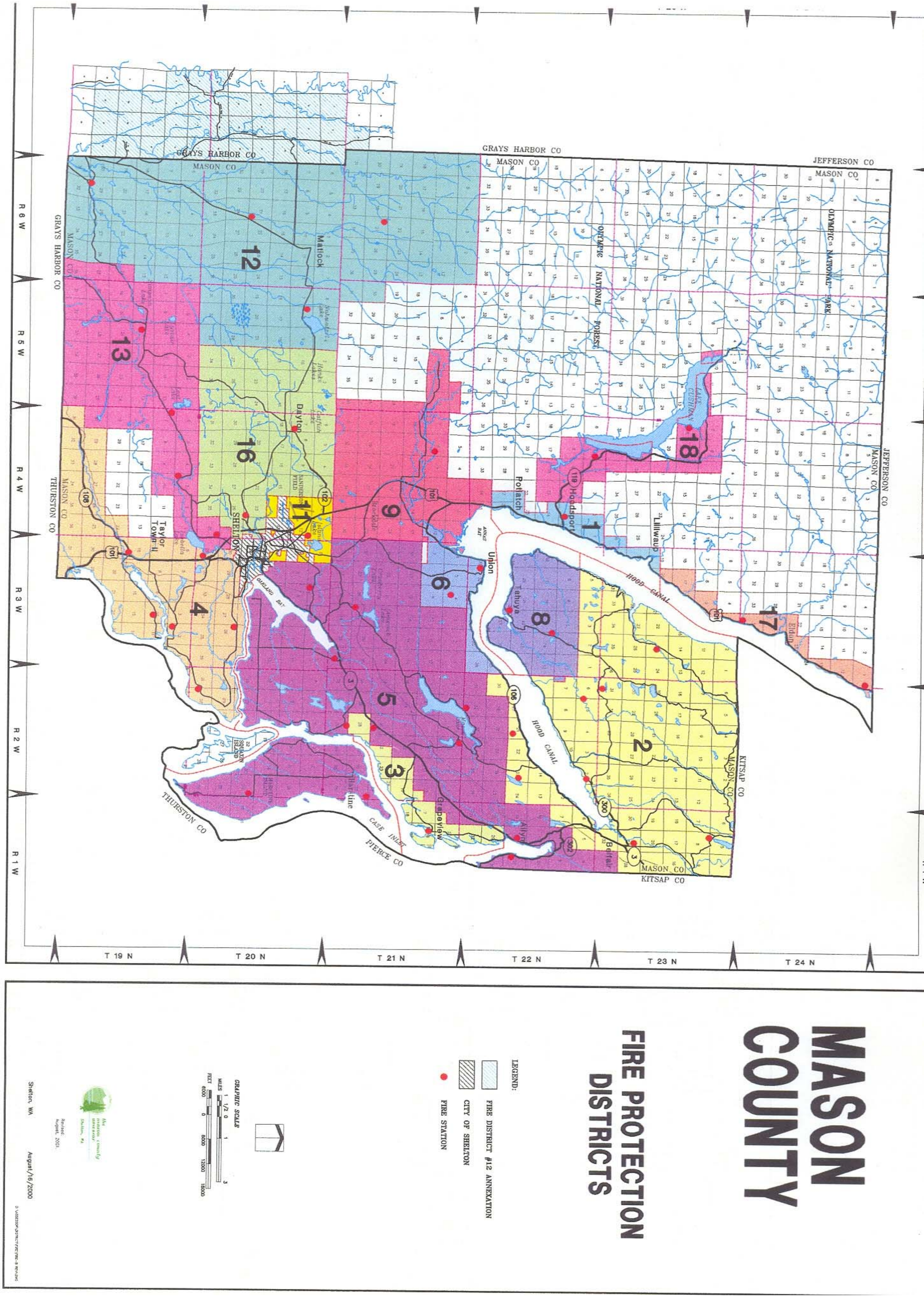
FIRE DISTRICT 5
FIRE DISTRICT 1
FIRE DISTRICT 2
FIRE DISTRICT 3
FIRE DISTRICT 4
F.D. 1
CITY OF PORT TOWNSEND
PORT TOWNSEND BAY
DISCOVERY BAY
CLALLAM COUNTY
OAK BAY
DABOB BAY
DISCOVERY BAY
HOOD CANAL
SQUAMISH HARBOR
KITSAP COUNTY
ADMIRALTY INLET
STRAIT OF JUAN DE FUCA
FIRE DISTRICTS
EASTERN JEFFERSON COUNTY
WASHINGTON
LEGEND
STATE AND FEDERAL HIGHWAYS
COUNTY ROADS

APPENDICES 3

KITSAP COUNTY EMERGENCY RESPONSE MAP



APPENDICES 4


MASON
COUNTY
FIRE PROTECTION
DISTRICTS
LEGEND:
FIRE DISTRICT #12 ANNEXATION
CITY OF SHELTON
FIRE STATON
GRAPHIC SCALE
Shelton, WA
August/16/2000
GRAYS HARBOR CO
MASON CO
JEFFERSON CO
KITSAP CO
THURSTON CO
PIERCE CO
OLYMPIC NATIONAL FOREST
OLYMPIC NATIONAL PARK
HOOD CANAL
CASE INLET
SHELTON
Matlock
Dayton
Potlatch
Hoodsport
Lilliwaup
Union
Tahuya
Belfair
Allyn
Grapeview
Taylor Town II
T 19 N
T 20 N
T 21 N
T 22 N
T 23 N
T 24 N
R 6 W
R 5 W
R 4 W
R 3 W
R 2 W
R 1 W

NORTHWEST REGION
EMS & TRAUMA SYSTEM

PATIENT CARE PROCEDURES

Northwest Region EMS & Trauma Care Council
5610 Kitsap Way, Suite 240
Post Office Box 5179
Bremerton, WA 98312

ADOPTED By Northwest Region EMS & Trauma Care Council

REVISED By Northwest Region EMS & Trauma Care Council

_____
Tim McKern, Chairperson

INTRODUCTION

The Northwest Region's Patient Care Procedures are designed to serve as a guide to Medical Program Directors, trauma verified EMS agencies, 9-1-1 centers and EMS personnel as to how and when to activate the Northwest Region's Trauma System. These procedures apply to Clallam, Jefferson, Kitsap and Mason Counties.

The following Regional Patient Care Procedures are intended as an approach toward the proper and rapid treatment of major trauma patients in the Northwest Region.

OBJECTIVE OF THE TRAUMA SYSTEM

The objective of the EMS & Trauma System in the Northwest Region is to transport the proper patient to the proper facility in the proper amount of time based on their "trauma needs" and medical needs. As such, major trauma patients from the following categories should be considered at high risk for death or disability and should be considered for transfer or transport to the appropriate Level I or Level II trauma center.

Central Nervous System Injuries

Head injury with any of the following:

- Open, penetrating, or depressed skull fracture
- CSF leak
- Severe coma
- Deterioration in Glasgow Coma Score of 2 or more points
- Lateralizing signs
- Unstable spine
- Spinal cord injury

Chest

Suspected great vessel or cardiac injuries
Major chest wall injury
Patient who may require positive pressure ventilation

Pelvis

Pelvic ring disruption with shock requiring more than 5 units transfusion
Evidence of continued hemorrhage
Compound/open pelvic injury with head injury

Multiple System Injury

Severe facial injury with head injury
Chest injury with head injury
Abdominal or pelvic injury with head injury
Burns with head injury

Specialized Problems

Burns over 20 percent of the patient's body surface area involving airway
Carbon monoxide poisoning
Barotrauma

Secondary Deterioration (Late Sequelae)

Patient requiring mechanical ventilation
Sepsis
Organ system(s) failure (deterioration in CNS, cardiac, pulmonary, hepatic, renal or coagulation system(s)
Osteomyelitis

EMT's and/or Paramedics shall use the State of Washington's Prehospital Trauma Triage (Destination) Procedures [Addendum 1] and be knowledgeable of the steps required to activate the Trauma System. In general, major trauma patients who meet the major trauma criteria listed above should be immediately transported or transferred to Harborview Trauma Center in Seattle.

ACTIVATION OF TRAUMA SYSTEM

Upon evaluation of the patient(s) and determination of the need for a trauma team, the Paramedic, EMT, or appropriate medical personnel shall contact medical control at the nearest or most appropriate designated trauma center and request the activation of the Trauma System.

Once identified, trauma patients should be banded, treated, transported and trauma data collected as quickly as possible. In all cases, the goal of the Northwest Region Trauma System is to have all major trauma patients delivered to the most appropriate trauma center to meet the needs of the patient within 60 minutes from the time of arrival of EMS on scene of the trauma incident.

DESIGNATED TRAUMA CENTERS

Washington State Department of Health has designated five trauma centers in the Northwest Region to receive major trauma patients.

Those trauma centers and their designation levels are:

Location	Facility	Level
Clallam County	Forks Community Hospital	IV
	Olympic Medical Center	III
Jefferson County	Jefferson General Hospital	IV
Kitsap County	Harrison Memorial Hospital	III
Mason County	Mason General Hospital	IV

DATA COLLECTION

WAC 246-976-420 Trauma registry -- Department responsibilities. (1) **Purpose:** The department maintains a trauma registry, as required by RCW 70.168.060 and 70.168.090. The purpose of this registry is to:

(a) Provide data for injury surveillance, analysis, and prevention programs;

(b) Monitor and evaluate the outcome of care of major trauma patients, in support of statewide and regional quality assurance and system evaluation activities;

(c) Assess compliance with state standards for trauma care;

(d) Provide information for resource planning, system design and management;

(e) Provide a resource for research and education.

(2) **Confidentiality:** It is essential for the department to protect information regarding specific patients and providers. Data elements related to the identification of individual patient's, provider's, and facility's care outcomes shall be confidential, shall be exempt from RCW 42.17.250 through 42.17.450, and shall not be subject to discovery by subpoena or admissible as evidence.

(a) The department may release confidential information from the trauma registry in compliance with applicable laws and regulations. No other person may release confidential information from the trauma registry without express written permission from the department.

(b) The department may approve requests for trauma registry data from qualified agencies or individuals, consistent with applicable statutes and rules. The department may charge reasonable costs associated with such requests.

(c) The data elements indicated as confidential in Tables E, F and G below are considered confidential.

(d) The department will establish criteria defining situations in which additional registry information is confidential, in order to protect confidentiality for patients, providers, and facilities.

(e) This paragraph does not limit access to confidential data by approved regional quality assurance programs established under chapter 70.168 RCW and described in WAC 246-976-910.

(3) **Inclusion criteria:**

(a) The department will establish inclusion criteria to identify those injured patients that designated trauma services must report to the trauma registry.

These criteria will include:

(i) All patients who were discharged with ICD diagnosis codes of 800.0 - 904.99, 910 - 959.9 (injuries), 994.1 (drowning), 994.7 (asphyxiation), or 994.8 (electrocution) and:

(A) For whom the hospital trauma resuscitation team was activated; or

(B) Who were dead on arrival at your facility; or

(C) Who were dead at discharge from your facility; or

(D) Who were transferred by ambulance into your facility from another facility; or

(E) Who were transferred by ambulance out of your facility to another acute care facility; or

(F) Adult patients (age fifteen or greater) who were admitted as inpatients to your facility and have a length of stay greater than two days or forty-eight hours; or

(G) Pediatric patients (ages under fifteen years) who were admitted as inpatients to your facility, regardless of length of stay; or

(ii) All patients who meet the requirements of the state of Washington prehospital trauma triage procedures described in WAC 246-976-930(3);

(b) For all licensed rehabilitation services, these criteria will include all patients who were included in the trauma registry for acute care.

(4) **Other data:** The department and regional quality assurance programs may request data from medical examiners and coroners in support of the registry.

(5) **Data linking:** To link data from different sources, the department will establish procedures to assign a unique identifying number (trauma band number) to each trauma patient. All providers reporting to the trauma registry must include this trauma number.

(6) **Data submission:** The department will establish procedures and format for providers to submit data electronically. These will include a mechanism for the reporting agency to check data for validity and completeness before data is sent to the registry.

(7) **Data quality:** The department will establish mechanisms to evaluate the quality of trauma registry data. These mechanisms will include at least:

(a) Detailed protocols for quality control, consistent with the department's most current data quality guidelines.

(b) Validity studies to assess the timeliness, completeness and accuracy of case identification and data collection. The department will report quarterly on the timeliness, accuracy and completeness of data.

(8) **Registry reports:**

(a) Annually, the department will report:

(i) Summary statistics and trends for demographic and related information about trauma care, for the state and for each EMS/TC region;

(ii) Outcome measures, for evaluation of clinical care and system-wide quality assurance and quality improvement programs.

(b) Semiannually, the department will report:

(i) Trends, patient care outcomes, and other data, for each EMS/TC region and for the state, for the purpose of regional evaluation;

(ii) On all patient data entered into the trauma registry during the reporting period;

(iii) Aggregate regional data to the regional EMS/TC council, excluding any confidential or identifying data.

(c) The department will provide:

(i) Provider-specific raw data to the provider that originally submitted it;

(ii) Periodic reports on financial data;

(iii) Registry reports to all providers that have submitted data;

(iv) For the generation of quarterly reports to all providers submitting data to the registry, for the purpose of planning, management, and quality assurance.

WAC 246-976-430 Trauma registry -- Provider responsibilities. (1) Trauma care providers, prehospital and hospital, must place a trauma ID band on trauma patients, if not already in place from another agency.

(2) All trauma care providers must protect the confidentiality of data in their possession and as it is transferred to the department.

(3) All trauma care providers must correct and resubmit records which fail the department's validity tests described in WAC 246-976-420(6). You must send corrected records to the department within three months of notification.

(4) Licensed prehospital services that transport trauma patients must:

(a) Assure personnel use the trauma ID band.

(b) Report data as shown in Table E for trauma patients defined in WAC 246-976-420. Data is to be reported to the receiving facility in an approved format within ten days.

(5) Designated trauma services must:

(a) Assure personnel use the trauma ID band.

(b) Report data elements shown in Table F for all patients defined in WAC 246-976-420.

(c) Report patients discharged in a calendar quarter in an approved format by the end of the following quarter. The department encourages more frequent data reporting.

(6) Designated trauma rehabilitation services must:

(a) Report data on all patients who were included in the trauma registry for acute care.

(b) Report either:

(i) Data elements shown in Table G; or

(ii) If the service submits data to the uniform data set for medical rehabilitation, provide a copy of the data to the department.

TABLE E: Prehospital Data Elements for the Washington Trauma Registry

Data Element	Type of patient: Pre-Hosp Transport	Type of patient: Inter-Facility
Note: **(C)** identifies elements that are confidential. See WAC 246-976-420 (2)(c).		
Incident Information		
Agency identification number **(C)**	X	X
Date of response **(C - day only)**	X	X
Run sheet number **(C)**	X	X
First agency on scene identification number **(C)**	X	
Level of personnel	X	X
Mode of transport	X	X
Incident county code	X	
Incident location (type)	X	
Incident response area type	X	

Patient Information		
Patient's trauma identification band number **(C)**	X	X
Name **(C)**	X	X
Date of birth **(C)**, **or** Age	X	X
Sex	X	X
Mechanism of injury	X	
Safety restraint or device used	X	
Transportation		
Transported from (code) **(C - if hospital ID)**	X	X
Reason for destination decision	X	X
Times		
Transporting agency dispatched	X	X
Transporting agency arrived at scene	X	X
Transporting agency departed from scene	X	X
Vital Signs		
Time	X	X
Systolic blood pressure	X	X
Respiratory rate	X	X
Pulse	X	X
Glasgow coma score (three components)	X	X
Pupils	X	X
Vitals from 1st agency on scene?	X	
Trauma Triage Criteria		
Vital signs, consciousness level	X	
Anatomy of injury	X	
Biomechanics of injury	X	
Other risk factors	X	
Gut feeling of medic	X	
Prehospital trauma system activation?	X	
Other Severity Measures		
Respiratory quality	X	
Consciousness	X	
Time (interval) for extrication	X	
Treatment: EMS interventions	X	X

TABLE F: Hospital Data Elements for the Washington Trauma Registry

All licensed hospitals must submit the following data for patients identified in WAC 246-976-420(3):

Note: **(C)** identifies elements that are confidential. See WAC 246-976-420(2).

Record Identification

- Identification of reporting facility **(C)**;
- Date and time of arrival at reporting facility **(C - day only)**;
- Unique patient identification number assigned to the patient by the reporting facility **(C)**;
- Patient's trauma identification band number **(C)**;

Patient Identification

- Name **(C)**;
- Date of birth **(C - day only)**;
- Sex;
- Race;
- Social Security number **(C)**;
- Home zip code;

Prehospital Incident Information

- Date and time of incident **(C - day only)**;
- Prehospital trauma system activated?;
- First agency on-scene ID number;
- Arrival via EMS system?;
- Transporting (reporting) agency ID number;
- Transporting agency run number **(C)**;
- Mechanism of injury;
- Respiratory quality;
- Consciousness;
- Incident county code;
- Incident location type;
- Response area type;
- Occupational injury?;
- Safety restraint/device used;

Earliest Available Prehospital Vital Signs

- Time;
- Systolic blood pressure;
- Respiratory rate;
- Pulse rate;
- Glasgow coma score (three components);
- Pupils;
- Vitals from 1st on-scene agency?;

Extrication time over twenty minutes?;

Prehospital procedures performed;

Prehospital Triage

- Vital signs/consciousness;
- Anatomy of injury;
- Biomechanics of injury;
- Other risk factors;
- Gut feeling of medic;

Transportation Information
- Time transporting agency dispatched;
- Time transporting agency arrived at scene;
- Time transporting agency left scene;
- Transportation mode;
- Personnel level;
- Transported from;
- Reason for destination;

ED or Admitting Information
- Time ED physician called;
- ED physician called "code"?;
- Time ED physician available for patient care;
- Time trauma team activated;
- Level of trauma team activation;
- Time trauma surgeon called;
- Time trauma surgeon available for patient care;
- Vital Signs in ED
  - Patient dead on arrival at your facility?;
  - First and last systolic blood pressure;
  - First and last temperature;
  - First and last pulse rate;
  - First and last spontaneous respiration rate;
  - Lowest systolic blood pressure;
  - Glasgow coma scores (eye, verbal, motor);
- Injury Severity scores
  - Prehospital Index (PHI) score;
  - Revised Trauma Score (RTS) on admission;
  - For pediatric patients:
    - Pediatric Trauma Score (PTS) on admission;
    - Pediatric Risk of Mortality (PRISM) score on admission;
    - Pediatric Risk of Mortality - Probability of Survival (PRISM P(s));
    - Pediatric Overall Performance Category (POPC);
    - Pediatric Cerebral Performance Category (PCPC):
- ED procedures performed;
- ED complications;
- Time of ED discharge;
- ED discharge disposition, including
  - If admitted, the admitting service;
  - If transferred out, ID of receiving hospital

Diagnostic and Consultative Information
- Date and time of head CT scan;
- Date of physical therapy consult;
- Date of rehabilitation consult;
- Blood alcohol content;
- Toxicology screen results;
- Drugs found;
- Co-morbid factors/Preexisting conditions;

Surgical Information
- For the first operation:
  - Date and time patient arrived in operating room;

Date and time operation started;
OR procedure codes;
For later operations:
Date of operation
OR Procedure Codes

Critical Care Unit Information

Date and time of admission for primary stay in critical care unit;
Date and time of discharge from primary stay in critical care unit;
Length of readmission stay(s) in critical care unit;

Other procedures performed (not in OR)

Discharge Status

Date and time of facility discharge **(C - day only)**;
Most recent ICD diagnosis codes/discharge codes, including nontrauma codes;
E-codes, primary and secondary;
Glasgow Score at discharge;
Disability at discharge (Feeding/Locomotion/Expression)

Discharge disposition

If transferred out, ID of facility patient was transferred to **(C)**
If patient died in your facility
Date and time of death **(C - day only)**;
Was an autopsy done?;
Was case referred to coroner or medical examiner?
Did coroner or medical examiner accept jurisdiction?
Was patient evaluated for organ donation?

Financial Information (All Confidential)

For each patient
Total billed charges;
Payer sources (by category);
Reimbursement received (by payer category);
Annually, submit ratio-of-costs-to-charges, by department.

TABLE G: Data Elements for Designated Rehabilitation Services

Designated trauma rehabilitation services must submit the following data for patients identified in WAC 246-976-420(3).

Note: **(C)** identifies elements that are confidential. WAC 246-976-420(2)

Rehabilitation services, Levels I and II

Patient Information

Facility ID **(C)**
Facility Code
Patient Code
Trauma tag/identification Number **(C)**
Date of Birth **(C - day only)**
Social Security Number **(C)**
Patient Name **(C)**
Patient Sex

Care Information

Date of Admission **(C - day only)**
Admission Class

Date of Discharge **(C - day only)**
Impairment Group Code
ASIA Impairment Scale

Diagnosis (ICD-9) Codes

Etiologic Diagnosis
Other significant diagnoses
Complications/comorbidities
Diagnosis for transfer or death

Other Information

Date of onset
Admit from (Type of facility)
Admit from (ID of facility)
Acute trauma care by (ID of facility)
Prehospital living setting
Prehospital vocational category
Discharge-to-living setting

Functional Independence Measure (FIM) - One set on admission and one on discharge

Self Care
Eating
Grooming
Bathing
Dressing - Upper
Dressing - Lower
Toileting
Sphincter control
Bladder
Bowel
Transfers
Bed/chair/wheelchair
Toilet
Tub/shower
Locomotion
Walk/wheelchair
Stairs
Communication
Comprehension
Expression
Social cognition
Social interaction
Problem solving
Memory

Payment Information (all confidential)

Payer source - primary and secondary
Total Charges
Remitted reimbursement by category

Rehabilitation, Level III

Patient Information
- Facility ID **(C)**
- Patient number **(C)**
- Trauma tag/identification Number **(C)**
- Social Security Number **(C)**
- Patient Name **(C)**

Care Information
- Date of Admission **(C - day only)**

Impairment Group Code

Diagnosis (ICD-9) Codes
- Etiologic Diagnosis
- Other significant diagnoses
- Complications/comorbidities

Other Information
- Admit from (Type of facility)
- Admit from (ID of facility) **(C)**
- Acute trauma care given by (ID of facility) **(C)**
- Inpatient trauma rehabilitation given by (ID of facility) **(C)**
- Discharge-to-living setting

Payment Information (all confidential)
- Payer source - primary and secondary
- Total Charges
- Remitted reimbursement by category

Data shall arrive at the DOH registry in an approved format no later than ninety days after the end of the quarter.

DEFINITIONS

WAC 246-976-010 Definitions. Definitions in RCW 18.71.200, 18.71.205, 18.73.030, and 70.168.015 apply to this chapter. In addition, unless the context plainly requires a different meaning, the following words and phrases used in this chapter mean:

"ACLS" means advanced cardiac life support, a course developed by the American Heart Association.

"Activation of the trauma system" means mobilizing resources to care for a trauma patient in accordance with regional patient care procedures. When the prehospital provider identifies a major trauma patient, using approved prehospital trauma triage procedures, he or she notifies both dispatch and medical control from the field.

"Adolescence" means the period of physical and psychological development from the onset of puberty to maturity, approximately twelve to eighteen years of age.

"Advanced first aid," for the purposes of RCW 18.73.120, 18.73.150, and 18.73.170, means a course of at least twenty-four hours of instruction, which includes at least:

- CPR;
- Airway management;
- Trauma/wound care;
- Immobilization.

"Agency response time" means the interval from agency notification to arrival on the scene. It is the combination of activation and enroute times defined under system response times in this section.

"Aid service" means an agency licensed by the department to operate one or more aid vehicles, consistent with regional and state plans.

"Airway technician" means a person who:

- Has been trained in an approved program to perform endotracheal airway management and other authorized aids to ventilation under written or oral authorization of an MPD or approved physician delegate; and
- Has been examined and certified as an airway technician by the department or by the University of Washington's school of medicine.

"ALS" means advanced life support.

"Ambulance service" means an agency licensed by the department to operate one or more ground or air ambulances. Ground ambulance service operation must be consistent with regional and state plans. Air ambulance service operation must be consistent with the state plan.

"Approved" means approved by the department of health.

"ATLS" means advanced trauma life support, a course developed by the American College of Surgeons.

"Attending surgeon" means a physician who is board-certified or board-qualified in general surgery, and who has surgical privileges delineated by the facility's medical staff. The attending surgeon is responsible for care of the trauma patient, participates in all major therapeutic decisions, and is present during operative procedures.

"Available" for designated trauma services described in WAC 246-976-485 through 246-976-890 means physically present in the facility and able to deliver care to the patient within the time specified. If no time is specified, the equipment or personnel must be available as reasonable and appropriate for the needs of the patient.

"BLS" means basic life support.

"Basic life support" means emergency medical services requiring basic medical treatment skills as defined in chapter 18.73 RCW.

"Board certified" means that a physician has been certified by the appropriate specialty board recognized by the American Board of Medical Specialties. For the purposes of this chapter, references to "board certified" include physicians who are board-qualified.

"Board-qualified" means physicians who have graduated less than five years previously from a

residency program accredited for the appropriate specialty by the accreditation council for graduate medical education.

"BP" means blood pressure.

"Certification" means the department recognizes that an individual has met predetermined qualifications, and authorizes the individual to perform certain procedures.

"CME" means continuing medical education.

"Consumer" means an individual who is not associated with the EMS/TC system, either for pay or as a volunteer, except for service on the steering committee, licensing and certification committee, or regional or local EMS/TC councils.

"Continuing medical education (CME)" means ongoing education after initial certification to maintain and enhance skill and knowledge.

"CPR" means cardiopulmonary resuscitation.

"Dispatch" means to identify and direct an emergency response unit to an incident location.

"E-code" means external cause code, an etiology included in the International Classification of Diseases (ICD).

"ED" means emergency department.

"Emergency medical services and trauma care (EMS/TC) system" means an organized approach to providing personnel, facilities, and equipment for effective and coordinated medical treatment of patients with a medical emergency or injury requiring immediate medical or surgical intervention to prevent death or disability. The emergency medical service and trauma care system includes prevention activities, prehospital care, hospital care, and rehabilitation.

"EMS" means emergency medical services.

"EMS/TC" means emergency medical services and trauma care.

"EMT" means emergency medical technician.

"General surgeon" means a licensed physician who has completed a residency program in surgery and who has surgical privileges delineated by the facility.

"ICD" means the international classification of diseases, a coding system developed by the World Health Organization.

"ILS" means intermediate life support.

"Injury prevention" means any combination of educational, legislative, enforcement, engineering and emergency response initiatives used to reduce the number and severity of injuries.

"Interfacility transport" means medical transport of a patient between recognized medical treatment facilities requested by a licensed health care provider.

"Intermediate life support (ILS) technician" means a person who:

• Has been trained in an approved program to perform specific phases of advanced cardiac and trauma life support as specified in this chapter, under written or oral direction of an MPD or approved physician delegate; and

• Has been examined and certified as an ILS technician by the department or by the University of Washington's school of medicine.

"Intravenous therapy technician" means a person who:

• Has been trained in an approved program to initiate IV access and administer intravenous solutions under written or oral authorization of an MPD or approved physician delegate; and

• Has been examined and certified as an intravenous therapy technician by the department or by the University of Washington's school of medicine.

"IV" means intravenous.

"Licensing and certification committee (L&C committee)" means the emergency medical services licensing and certification advisory committee created by RCW 18.73.040.

"Local council" means a local EMS/TC council authorized by RCW 70.168.120(1).

"Local medical community" means the organized local medical society existing in a county or counties; or in the absence of an organized medical society, majority physician consensus in the

county or counties.

"Medical control" means MPD authority to direct the medical care provided by certified EMS personnel in the prehospital EMS system.

"Medical control agreement" means a written agreement between two or more MPDs, using similar protocols that are consistent with regional plans, to assure continuity of patient care between counties, and to facilitate assistance.

"MPD" means medical program director.

"Must" means shall.

"Ongoing training and evaluation" (OTEP) means a course of education authorized for first responders and EMTs in RCW 18.73.081 (3)(b).

"PALS" means pediatric advanced life support, a course developed by the American Heart Association.

"Paramedic" means a person who:

• Has been trained in an approved program to perform all phases of prehospital emergency medical care, including advanced life support, under written or oral authorization of an MPD or approved physician delegate; and

• Has been examined and certified as a paramedic by the department or by the University of Washington's school of medicine.

"Physician" means an individual licensed under the provisions of chapters 18.71 or 18.57 RCW.

"Practical examination" means a test conducted in an initial course, or a test or series of evaluations during a recertification period, to determine competence in each of the practical skills specified by the department.

"Prehospital agencies" means providers of prehospital care or interfacility ambulance transport.

"Prehospital index" means a scoring system used to activate a hospital trauma resuscitation team.

"Prehospital patient care protocols" means the written procedures adopted by the MPD under RCW 18.73.030(13) and70.168.015 (26) which direct the out-of-hospital emergency care of the emergency patient which includes the trauma care patient. These protocols are related only to delivery and documentation of direct patient treatment.

"Prehospital trauma care services" means agencies that are verified to provide prehospital trauma care.

"Prehospital trauma triage procedures" means the method used by prehospital providers to evaluate injured patients and determine whether to activate the trauma system from the field. It is described in WAC 246-976-930(2).

"Public education" means education of the population at large, targeted groups or individuals, in preventive measures and efforts to alter specific injury-related behaviors.

"Quality assurance (QA)" means an organized quality assessment and improvement program to audit and evaluate care provided in EMS/TC systems, with the goal of improving patient outcomes.

"Regional council" means the regional EMS/TC council established by RCW 70.168.100.

"Regional patient care procedures (RPCP)" means procedures adopted by a regional council under RCW 18.73.030(14) and70.168.015 (23), and approved by the department. Regional patient care procedures do not relate to direct patient care.

"Regional plan" means the plan defined in WAC 246-976-960 (1)(b) that has been approved by the department.

"Registered nurse" means an individual licensed under the provisions of chapter 18.79 RCW.

"Response area" means a service coverage zone identified in an approved regional plan.

"Rural" means unincorporated or incorporated areas with total populations less than ten thousand people, or with a population density of less than one thousand people per square mile.

"Senior EMT instructor (SEI)" means an individual approved to be responsible for the quality of instruction and the conduct of basic life support training courses.

"Special competence" means that an individual has been deemed competent and committed to a medical specialty area with documented training, board certification and/or experience, which has been reviewed and accepted as evidence of a practitioner's expertise:

- For physicians, by the facility's medical staff;
- For registered nurses, by the facility's department of nursing;
- For physician assistants and advanced registered nurse practitioners, as defined in the facility's bylaws.

"Specialized training" means approved training of certified EMS personnel to use a skill, technique, or equipment that is not included in the standard course curriculum.

"State plan" means the emergency medical services and trauma care system plan described in RCW 70.168.015(7), adopted by the department under RCW 70.168.060(10).

"Steering committee" means the EMS/TC steering committee created by RCW 70.168.020.

"Suburban" means an incorporated or unincorporated area with a population of ten thousand to twenty-nine thousand nine hundred ninety nine or any area with a population density of one thousand to two thousand people per square mile.

"System response time" for trauma means the interval from discovery of an injury until the patient arrives at a designated trauma facility. It includes:

"Discovery time": The interval from injury to discovery of the injury;

"System access time": The interval from discovery to call received;

"911 time": The interval from call received to dispatch notified, including the time it takes the call answerer to:

- Process the call, including citizen interview; and
- Give the information to the dispatcher;

"Dispatch time": The interval from call received by the dispatcher to agency notification;

- **"Activation time":** The interval from agency notification to start of response;
- **"Enroute time":** The interval from the end of activation time to the beginning of on-scene time;
- **"Patient access time":** The interval from the end of enroute time to the beginning of patient care;
- **"On scene time":** The interval from arrival at the scene to departure from the scene. This includes extrication, resuscitation, treatment, and loading;
- **"Transport time":** The interval from leaving the scene to arrival at a health care facility;

"Training agency" means an organization or individual that is approved to be responsible for specified aspects of training of EMS personnel.

"Training physician" means a physician delegated by the MPD and approved by the department to be responsible for specified aspects of training of EMS personnel.

"Trauma rehabilitation coordinator" means a person designated to facilitate early rehabilitation interventions and the trauma patient's access to a designated rehabilitation center.

"Urban" means:

- An incorporated area over thirty thousand; or
- An incorporated or unincorporated area of at least ten thousand people and a population density over two thousand people per square mile.

"Wilderness" means any rural area not readily accessible by public or private maintained road.

PATIENT CARE PROCEDURE – Dispatch

Standard

Provide timely care to all trauma patients so major trauma patients are provided appropriate medical treatment within the "golden hour" of trauma treatment.

As outlined in the Regional Trauma System Plan, "Dispatch Time" is defined as "the time from when the call is received by dispatch to the time the agency is notified" (WAC 246-976-010) [See Definitions].

As outlined in the Regional Trauma System Plan, "Response Time" is measured from "the time the call is received by the trauma verified service to the time of arrival on-scene".

For major trauma patients, the following time guidelines are to be used (measured from the time the call is received by the trauma verified service to the time of arrival on-scene):

First Response (80 percent of the time)

Urban Areas	8 minutes
Suburban Areas	15 minutes
Rural/rural-suburban	45 minutes
Wilderness/Marine/Frontier	As soon as possible

Transport Response Time (80 percent of the time)

Urban Areas	10 minutes
Suburban Areas	20 minutes
Rural/rural-suburban	45 minutes
Wilderness/Marine/Frontier	As soon as possible

Procedure

A licensed ambulance and/or aid service shall be dispatched to all emergency and trauma incidents in the Northwest Region.

The highest level trauma verified ambulance in the response area should be dispatched to transport all known or suspected major trauma patients who meet, or are suspected to meet, the State of Washington Prehospital Trauma Triage (Destination) Procedures [Addendum 1].

PATIENT CARE PROCEDURE – Response Times

Standard

All licensed ambulance and aid services shall respond to emergency medical and trauma incidents in a timely manner in accordance with the Northwest Region Plan and State WAC 246-976-390(10) [Addendum 4] and WAC 246-976-390(11) -Verification of Trauma Care Services [Addendum 5].

The Northwest Region EMS Council has identified the following urban, suburban, rural-suburban, rural and wilderness/marine/frontier areas response times in the Northwest Region Trauma Plan.

First Response (80 percent of the time)

Urban Areas	8 minutes
Suburban Areas	15 minutes
Rural/rural-suburban	45 minutes
Wilderness/Marine/Frontier	As soon as possible

Transport Response Time (80 percent of the time)

Urban Areas	10 minutes
Suburban Areas	20 minutes
Rural/rural-suburban	45 minutes
Wilderness/Marine/Frontier	As soon as possible

Procedure

In all major trauma cases, the Golden Hour shall be a dispatch/response/transport goal whenever possible.

A trauma verified service should proceed in an emergency mode to all suspected major trauma incidents until which time they have been advised of injury status to the patients involved.

PATIENT CARE PROCEDURE – Triage and Transport

Standard

All licensed ambulance/transport and aid services shall comply with the Northwest Region EMS & Trauma System Plan, Simple Triage and Rapid Treatment (START Triage) Protocol [Appendix 6] and the State of Washington Prehospital Trauma Triage (Destination) Procedures [Addendum 1] and transport trauma patients to the most appropriate designated trauma center.

When a destination facility is placed on divert status, field personnel shall transport to the next closest – equal or higher designated trauma facility.

Procedure

The first trauma care providing agency to determine that the patient needs definitive medical care or meets the State of Washington Trauma Triage (Destination) Procedures [Addendum 1] criteria, shall ensure immediate contact with a Level I or Level II trauma designated facility or the agency's on-line medical control.

The receiving facility must be provided with the following information, as outlined in the State of Washington Prehospital Trauma Triage (Destination) Procedures [Addendum 1]:

1. Identification of the EMS agency;
2. Patient's age, if known (or approximate age);
3. Patient's chief complaint(s) or problem;
4. Identification of the biomechanics and anatomy of the injury;
5. Basic vital signs (palpable pulse, where palpable, and rate of respiration;
6. Level of consciousness (Glasgow Coma Score or other means);
7. Other factors that require consultation with the base station;
8. Number of patients (if known); and
9. Estimated time of transport of the patient(s) to the nearest and highest level of trauma designated facility.
10. Estimated time of transport of the patient(s) from the scene to the nearest Level I or II facility

The first EMS person to determine that a patient meets the State of Washington Prehospital Trauma Triage (Destination) Procedures [Addendum 1] criteria shall attach a Washington State Trauma Registry Band to the patient's wrist or ankle.

An air ambulance transport should be considered for transport by agencies in the Northwest Region when transport by ground will be greater than 30 minutes, unless weather conditions do not allow for such use, as outlined in the State of Washington Prehospital Trauma Triage (Destination) Procedures [Addendum 1].

Data Collection

The first licensed service on scene shall be responsible for submitting the following data on all patients meeting the State of Washington Prehospital Trauma Triage (Destination) Procedures tool [Addendum 1]:

a. Run sheet number
b. Name or name code, when available;
c. Date of birth when available;
d. Age
e. Sex
f. Agency incident number;
g. Patient's trauma identification number;
h. Agency identification number;
i. First agency on scene (yes/no);
j. Transporting agency identification;
k. Level of transporting agency (BLS/ALS);
l. Incident county code;
m. Response area code of incident (urban, suburban, rural, wilderness);
n. Date of incident;
o. Time:
    1. Call received;
    2. Dispatched;
    3. Arrived at scene;
p. First scene:
    1. Systolic blood pressure;
    2. Respiratory rate;
    3. Pulse;
q. Glasgow coma score – eye, verbal and motor;
r. Systolic blood pressure less than ninety mm Hg in field (yes/no);
s. Mechanism of injury;
t. Prehospital trauma system activation (yes/no);
u. Extrication required;
v. Patient entrapped (yes/no);
w. Safety restraint or device used;
x. Field interventions done; and
y. Additional information if patient died at scene:
    1. Patient home zip code;
    2. Patient race and ethnicity when available.

The transporting service shall be responsible for submitting the following data:

a. Run sheet number or file number;
b. Name or name code
c. Date of birth, when available;
d. Age;
e. Sex;
f. Agency incident number;
g. Patient's trauma identification number
h. Agency identification number;
i. First agency on scene identification number;

j. Transporting agency identification;
k. Level of transporting agency (BLS/ALS);
l. Intra-facility transport;
m. Incident county code;
n. Response area code of incident (urban, suburban, rural, wilderness);
o. Date of incident;
p. First hospital transport to (code);
q. Second hospital transported to (code);
r. Intra-field rendezvous transport identification number;
s. Time of:
    1. Call received;
    2. Dispatch;
    3. Arrival at scene;
    4. Departure from scene;
    5. Arrival at intra-field destination or rendezvous;
    6. Arrival at first hospital;
    7. Departure from first hospital;
    8. Arrival at second hospital;
t. First:
    1. Systolic blood pressure;
    2. Respiratory rate;
    3. Pulse;
    4. Glasgow coma score – eye, verbal, and motor;
u. Systolic blood pressure less than ninety mm Hg in field;
v. Mechanism of injury;
w. Trauma triage criteria met;
x. Prehospital trauma system activation (yes/no);
y. Extrication required;
z. Patient entrapped (yes/no)
aa. Safety restrain/device used;
bb. Field interventions done;
cc. Receiving hospital contacted (code);
dd. Diverted;
ee. Mode of transport; and
ff. Additional information if patient dies in route:
    1. Patient home zip code;
    2. Patient race and/or ethnicity, when available.

Trauma verified ambulance and aid services shall collect documentation in the form of Northwest Region approved MIR forms or approved electronic computer submission.

Data shall be submitted to the Department of Health trauma registry in an approved format no later than ninety days after the end of the quarter.

PATIENT CARE PROCEDURE – Interfacility Transport

Standard

All designated trauma facilities shall have transfer agreements for the identification and transfer of trauma patients.

All interfacility transfers shall be in compliance with current OBRA/COBRA and EMTALA regulations and must be consistent with RCW 70.170.060(2) [Addendum 7].

Procedure

This is part of the Trauma Center Designation process and is addressed in the designation application process. The Northwest Region will use the procedures outlined by each facility in their designation application.

PATIENT CARE PROCEDURE – *Transport of Patients Outside of Base Area*

Standard

All licensed ambulance and aid services shall comply with the Northwest Region EMS & Trauma System Plan and the State of Washington Prehospital Trauma Triage (Destination) Procedures [Addendum 1] as defined in WAC 246-976-390 - Verification of Trauma Care Services [Addendum 4] and transport trauma patients to the most appropriate designated trauma center or facility.

Procedure

Patients transferred out of any local base coverage area (from either the base hospital or the field) are initially the responsibility of local on-line medical control. Prehospital personnel will follow local prehospital protocols. Initial orders, which are consistent with local prehospital protocols, will be obtained from base station on-line medical control.

When the transport service crosses into destination jurisdiction, the destination on-line medical control shall be contacted and given the following information:

6. Brief history
7. Pertinent physical findings
8. Summary of treatment (per protocols and per orders from base medical control)
9. Response to treatment
10. Current condition

The destination medical control physician may add further orders provided they are within the capabilities of the transport personnel.

The nearest trauma center base station will be contacted during the transport should the patient'' condition deteriorate and/or assistance is needed. The transport unit may divert to the closest trauma center as dictated by the patient's condition.

PATIENT CARE PROCEDURE – ***Activation of Air Ambulance for Field Response to Major Trauma***

Standard

All licensed ambulance and aid services shall comply with the Northwest Region EMS & Trauma System Plan and the State of Washington Prehospital Trauma Triage (Destination) Procedures as defined in WAC 246-976-390 - Verification of Trauma Care Services [Addendum 5] and transport trauma patients to the most appropriate designated trauma center or facility.

Procedure

The decision to activate air ambulance service for field response to major trauma shall be made by the highest certified responder from the scene with on-line medical control consultation. Where Incident Command System (ICS) is used, the commander shall be an integral part of this process.

Air ambulance services requested to respond into the Northwest Region will follow their policies for accepting a field mission and their Rotary Wing Primary Service Area criteria [Addendum 8].

REGIONAL CARE OF THE CRITICALLY ILL AND INJURED CHILD

Triage and Transfer Guidelines

Consideration should be given to early transfer of a child to the regional pediatric trauma center when required surgical or medical subspecialty care of resources are unavailable. These include, but are not limited to the following:

1. **Hemodynamically stable children with documented visceral injury being considered for "observational" management.** Although the efficacy of this approach in selected cases has been well documented, two significant caveats always apply:

   a) Hemodynamic *instability* mandates immediate operative intervention, and

   b) Nonoperative care is safe only in an environment that provides both close clinical observation *by a surgeon* experienced in the management of childhood trauma and immediately available operative care.

2. **Children with abnormal mental status.** In all but the infant, outcome from closed head injury has been shown to be significantly better for the child than for the adult. Although the quality and timeliness of initial resuscitation are the most important *determinants of outcome* from brain injury, continued comprehensive management in specialized units with multi-disciplinary pediatric critical care teams may provide a more rapid and complete recovery.

3. **Infants and small children.** Severely injured infants and small children are the most vulnerable and, frequently, the least stable trauma victims, because they require the special resources and environment of a regional pediatric trauma center, transfer should occur as soon as safely feasible.

4. **Children with injuries requiring complex or extensive reconstruction.** These services are traditionally most available in hospitals capable of functioning as a regional pediatric trauma center. It is especially important that children with impairments requiring long-term follow-up and supportive care have this provided or at last coordinated by the regional pediatric trauma center. Longitudinal follow-up of the injury-related disability is an essential requirement of the regional pediatric trauma center's trauma registry.

5. **Children with polysystem trauma requiring organ system support.** This is especially important for those patients requiring ventilatory, cardiovascular, renal, or nutritional support. Because these problems usually occur synchronously and require precise interdisciplinary coordination, they are best managed in comprehensive facilities such as regional pediatric trauma centers.

After airway management and primary resuscitation, consider the following points for transfer guidelines. A collaborative discussion is required between the transferring and receiving attending physicians.

1. Altered level of consciousness, mental status or declining trauma score (after primary resuscitation and airway management);

2. Head injury requiring CT Scan and/or neurosurgical consultation, for example: with lateralizing signs, seizures, loss of consciousness;

3. Major thoracic injury, e.g.: hemothorax, pulmonary contusion, possible great vessel injury, cardiac tramponade, flail chest;

4. Inability to evaluate abdomen due to mental status or lack of resources such as CT or peritoneal lavage;

5. Suspicion of foreign body in lower airway or main stem bronchi;

6. Unstable spinal fracture, suspected or actual spinal cord injury;

7. Primary accidental hypothermia with core temperature of 32 degrees C or less; or hypothermia with multi-system injury and core temperature of 34 degrees C or less;

8. High risk fractures such as: pelvic fracture, long bone injuries with neurovascular involvement (compromise);

9. Significant penetrating injuries to head, neck, thorax, abdomen or pelvis;

10. Need for mechanical ventilation;

11. Evidence of onset of organ failure, for example: acute respiratory distress syndrome, cardiac, renal or hepatic failure;

12. Cardiac dysrhythmias, cardiac pacing, superventricular tachycardia, or continuous infusion of one or more inotropic or cardiovascular agents, need for invasive monitoring;

13. Near drowning or asphyxiation with deteriorating mental status or progressive respiratory distress;

14. Burns of greater than 15% of the body (20% of age 10 or greater), 2nd degree or greater involving:

    a. The face, mouth and throat;
    b. Singed nasal hair;
    c. Brassy or sooty cough;
    d. Deep or excessive burns of the hands, feet, joints and/r perineum;
    e. Electrical injury (including lightening); and/or
    f. Chemical burns with threat of functional or cosmetic compromise.

    Should be transferred to a Regional Burn Center.

Referral to these centers must be protocol-driven and continuously monitored by the quality improvement process. Access to such care must be expeditious and must reflect ONLY medical need.

Adopted from: Resources for Equal Care of the Injured Patient: 1993
Committee on Trauma: American College of Surgeons

ADDENDUM 2

RCW 70.168.060 - Department duties – Timelines. The department, in consultation with and having solicited the advice of the Steering Committee shall:

(16) By July 1991, design and establish the state-wide trauma care registry as authorized in RCW 70.168.090 to

(a) assess the effectiveness of emergency medical services and trauma care delivery, and
(b) modify standards and other system requirements to improve the provision of emergency medical services and trauma care

ADDENDUM 3

RCW 70.168.090 – State-wide data registry – Quality assurance program – Confidentiality.

(1) By July 1991, the department shall establish a state-side data registry to collect and analyze data on the incidence, severity, and causes of trauma, including traumatic brain injury. The department shall collect additional data on traumatic brain injury should additional data requirements be enacted by the legislature. The registry shall be used to improve the availability and delivery of prehospital and hospital trauma care services. Specific data elements of the registry shall be defined by rule by the department. To the extent possible, the department shall coordinate data collection from hospitals for the trauma registry with the state-wide hospital data system authorized in chapter 70.170 RCW. Every hospital, facility, or health care provider authorized to provide level I, II, III, IV, or V trauma care services, level I, II, or III pediatric trauma care services, level I, level I-pediatric, II or III trauma-related rehabilitative services, and prehospital trauma-related services in the state shall furnish data to the registry. All other hospitals and prehospital providers shall furnish trauma data as required by the department by rule.

The department may respond to requests for data and other information from the registry for special studies and analysis consistent with requirements for confidentiality of patient and quality assurance records. The department may require requestors to pay any or all of the reasonable costs associated with such requests that might be approved.

ADDENDUM 4

WAC 246-976-390 – Verification of trauma care services

(10) Verified aid services must meet the following minimum agency response times for all major trauma responses to response areas as defined by the department and identified in the regional plan:
(a) To urban response areas: Eight minutes or less, eighty percent of the time;
(b) To suburban response areas: Fifteen minutes or less, eighty percent of the time;
(c) To rural response areas: Forty-five minutes or less, eighty percent of the time;
(d) To wilderness response areas: As soon as possible.

ADDENDUM 5

WAC 246-976-390 – Verification of trauma care services

(11) Verified ground ambulance services must meet the following minimum agency response times for all major trauma responses to response areas as defined by the department and identified in the regional plan:

(a) To urban response areas: Ten minutes or less, eighty percent of the time;

(b) To suburban response areas: Twenty minutes or less, eighty percent of the time;

(c) To rural response areas: Forty-five minutes or less, eighty percent of the time;

(d) To wilderness response areas: As soon as possible.

(12) Verified air ambulance services must meet minimum agency response times as identified in the state plan.

ADDENDUM 6

Simple Triage and Rapid Treatment Triage Protocol (START Triage)

1. RPM method of identifying immediate patients:
   Respiration's;
   Perfusion;
   Mental status
2. Triage Criteria
   A. Immediate (RED)

      Respiration >30 per minute or absent until head repositioned,or

      Radial pulse absent or capillary refill >2 seconds, or

      Can not follow simple commands
   B. Delayed (YELLOW)
      Respiration's present and <30 per minute, and

      Radial pulse present, and can follow simple commands

      ♦ The saying is 30 – 2 – can do, represents a delayed patient
   C. Minor (GREEN)
      Anyone that can get up and walk when you instruct them to do so
   D. Deceased (BLACK)
      Anyone not breathing after you open the airway
3. This system is limited to use in the incident where needs exceed resources immediately available
4. Frequently reassess patients and perform a more in-depth triage as more rescuers become available

ADDENDUM 7

RCW 70.170.060 – Charity care – Prohibited and required hospital practices and policies

(2) No hospital shall adopt or maintain practices or policies which would deny access to emergency care based on ability to pay. No hospital which maintains an emergency department shall transfer a patient with an emergency medical condition or who is in active labor unless the transfer is performed at the request of the patient or is due to the limited medical resources of the transferring hospital. Hospitals must follow reasonable procedures in making transfers to other hospitals including confirmation of acceptance of the transfer by the receiving hospital.

EMTALA federal guidelines will also be followed.